

Draw with code

Type-in JavaScript programs for young coders

Draw with code
Type-in JavaScript program for young coders

```
// Background
noStroke();
fill(188, 199, 231);
rect(0, 0, 800, 500);
fill(191, 144, 0);
rect(0, 500, 800, 600);

// Sun
fill("yellow");
circle(750, 50, 150);
stroke("yellow");
strokeWeight(6);
line(480, 60, 561, 47);
line(548, 224, 602, 172);
line(740, 304, 747, 236);

// Car
stroke("black");
strokeWeight(1);
fill(112, 173, 71);
rect(175, 340, 223, 54);
rect(188, 394, 362, 74);
fill(132, 60, 12);
circle(168, 468, 32);
circle(408, 468, 32);
```

Draw with code
Type-in JavaScript program for young coders

```
noStroke();
// Background
fill("#d9e3f3");
rect(0, 0, 800, 300);
fill("#ff9966");
rect(0, 300, 800, 600)

// Mast
fill("#804:0c");
rect(280, 36, 16, 321);
fill("#ff9966");
triangle(300, 36, 450, 207, 300, 264);

// Boat
fill("#7030a0");
rect(178, 357, 319, 140);
triangle(105, 357, 178, 357, 178, 497);
triangle(573, 357, 497, 497, 497, 357);

// Birds
fill("#07d31");
triangle(520, 52, 578, 52, 553, 67);
triangle(631, 71, 677, 71, 664, 85);
triangle(723, 121, 766, 121, 743, 135);
```

- 1 Open codeguppy.com code editor
- 2 Type in the program in the code editor
- 3 Run the program and observe the effect

Who should use this booklet?

This booklet is intended as a coding resource for parents, computer science teachers and coding club instructors. The booklet contains fun JavaScript programs for young coders.

This booklet is a very valuable resource for introducing kids to coding. No prior coding experience is necessary for kids ... or parents / educators.

How to use this booklet?

- Print this booklet and share printed programs with kids. Each page contains a full program, so you can share only one page at a time with a kid.
- Ask kids to type-in the programs in the Code Editor from codeguppy.com/hoc.html and then run it with the “Run” button.
- Encourage kids to customize the program by changing colors or adding additional shapes.

Note: The code editor is available publicly. Students don't need any account with codeguppy.com in order to access it.

Tips for typing-in the programs

Typing-in programs from a piece of paper is a great way to teach kids about coding. Since typing-in the program requires attention to details, kids will also develop useful skills beyond coding.

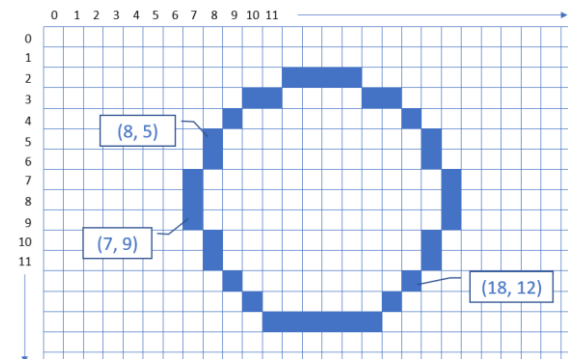
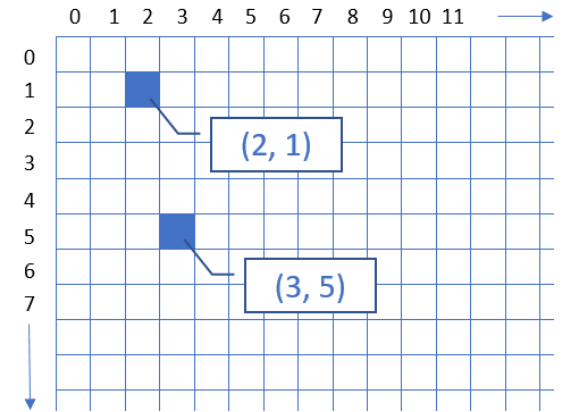
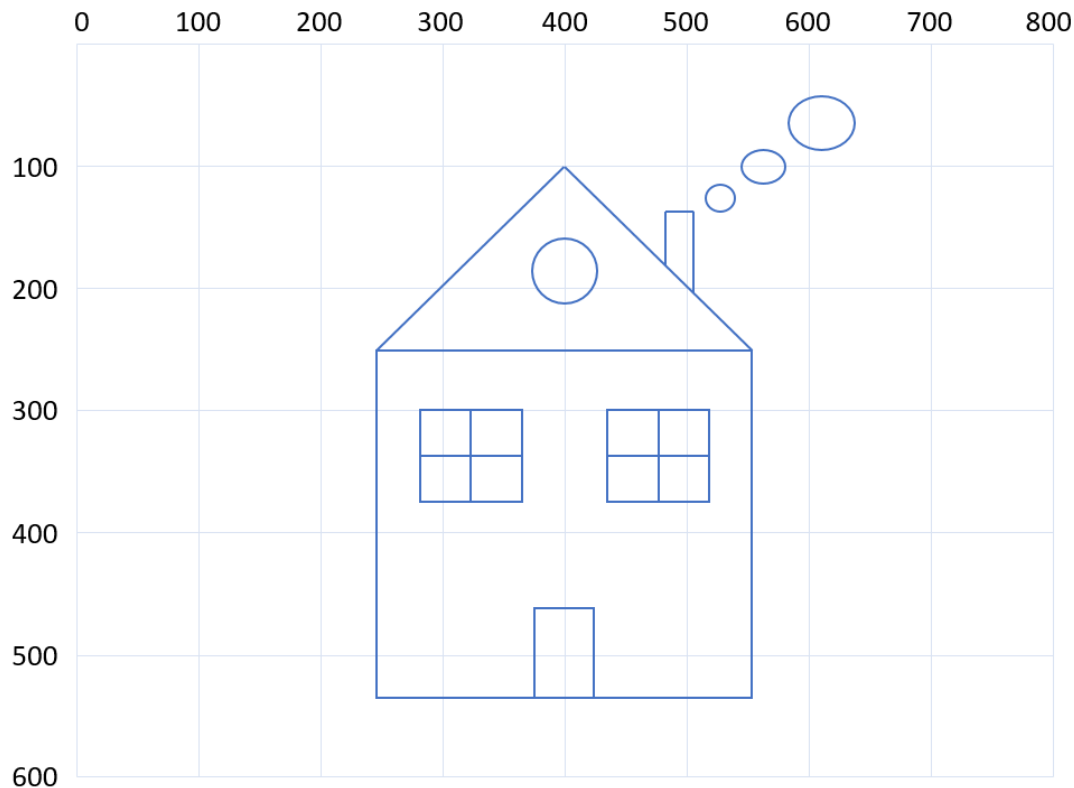
Here are a few tips to ensure programs are type-in correctly:

- Please ask kids to type-in each program very carefully exactly as it appears on the paper. Tell them to not skip any letter, number or punctuation sign!
- Programs are case sensitive. Please ask kids to type-in all the commands using the same case as it appears on the paper.
- To avoid accumulating errors, you can instruct kids to run the program from time to time, but only after the current line of code is completed. Running a program is as easy as pressing the big “Run” button in the top-right of the code editor.
- If computer will output errors, please check together with the kids the typed-in program against the program on the paper.

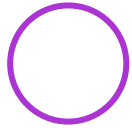
Understanding programs

All programs included in this booklet are drawing on a canvas. The canvas is made up of many small dots that you can turn black or white or even color them through code. These dots are called pixels.

In a sense the canvas is like a graph paper (grid paper), with each grid paper square being a tiny pixel on the canvas. The canvas used by our programs is 800 pixels wide by 600 pixels tall.



Graphical commands



circle(x, y, radius)

circle(400, 300, 100)
circle(400, 300, 50)



ellipse(x, y, width, height)

ellipse(400, 300, 200, 200)
ellipse(400, 300, 100, 50)



line(x1, y1, x2, y2)

line(100, 100, 700, 100)
line(50, 550, 750, 550)



rect(x, y, width, height)

rect(400, 300, 300, 200)
rect(350, 350, 300, 200)



point(x, y)

point(0, 0)
point(400, 300)



triangle(x1, y1, x2, y2, x3, y3)

triangle(400, 200, 300, 450, 500, 450)

Set the color for drawing

noStroke()
stroke(color)
strokeWeight(weight)

Set the color for filling

background(color)
fill(color)
noFill()

Specifying color

- #RRGGBB (red, green, blue components)
- Predefined color

Popular colors

- IndianRed, LightCoral, Salmon, DarkSalmon, LightSalmon, Crimson, Red, FireBrick, DarkRed
- Pink, LightPink, HotPink, DeepPink, MediumVioletRed, PaleVioletRed
- LightSalmon, Coral, Tomato, OrangeRed, DarkOrange, Orange
- Gold, Yellow, LightYellow, LemonChiffon, LightGoldenrodYellow, PapayaWhip, Moccasin, PeachPuff, PaleGoldenrod, Khaki, DarkKhaki
- Lavender, Thistle, Plum, Violet, Orchid, Fuchsia, Magenta, MediumOrchid, MediumPurple, RebeccaPurple, BlueViolet, DarkViolet, DarkOrchid, DarkMagenta, Purple, Indigo, Slate Blue, DarkSlateBlue, MediumSlateBlue
- GreenYellow, Chartreuse, LawnGreen, Lime, LimeGreen, PaleGreen, LightGreen, MediumSpringGreen, SpringGreen, MediumSeaGreen, SeaGreen, ForestGreen, Green, DarkGreen, YellowGreen, OliveDrab, Olive, DarkOliveGreen, MediumAquamarine, DarkSeaGreen, LightSeaGreen, DarkCyan, Teal
- Aqua, Cyan, LightCyan, PaleTurquoise, Aquamarine, Turquoise, MediumTurquoise, DarkTurquoise, CadetBlue, SteelBlue, LightSteelBlue, PowderBlue, LightBlue, SkyBlue, LightSkyBlue, DeepSkyBlue, DodgerBlue, CornflowerBlue, MediumSlateBlue, RoyalBlue, Blue, MediumBlue, DarkBlue, Navy, MidnightBlue
- Cornsilk, BlanchedAlmond, Bisque, NavajoWhite, Wheat, BurlyWood, Tan, RosyBrown, SandyBrown, Goldenrod, DarkGoldenrod, Peru, Chocolate, SaddleBrown, Sienna, Brown, Maroon
- White, Snow, HoneyDew, MintCream, Azure, AliceBlue, GhostWhite, WhiteSmoke, SeaShell, Beige, Old Lace, FloralWhite, Ivory, AntiqueWhite, Linen, LavenderBlush, MistyRose
- Gainsboro, LightGray, Silver, DarkGray, Gray, DimGray, LightSlateGray, SlateGray, DarkSlateGray, Black

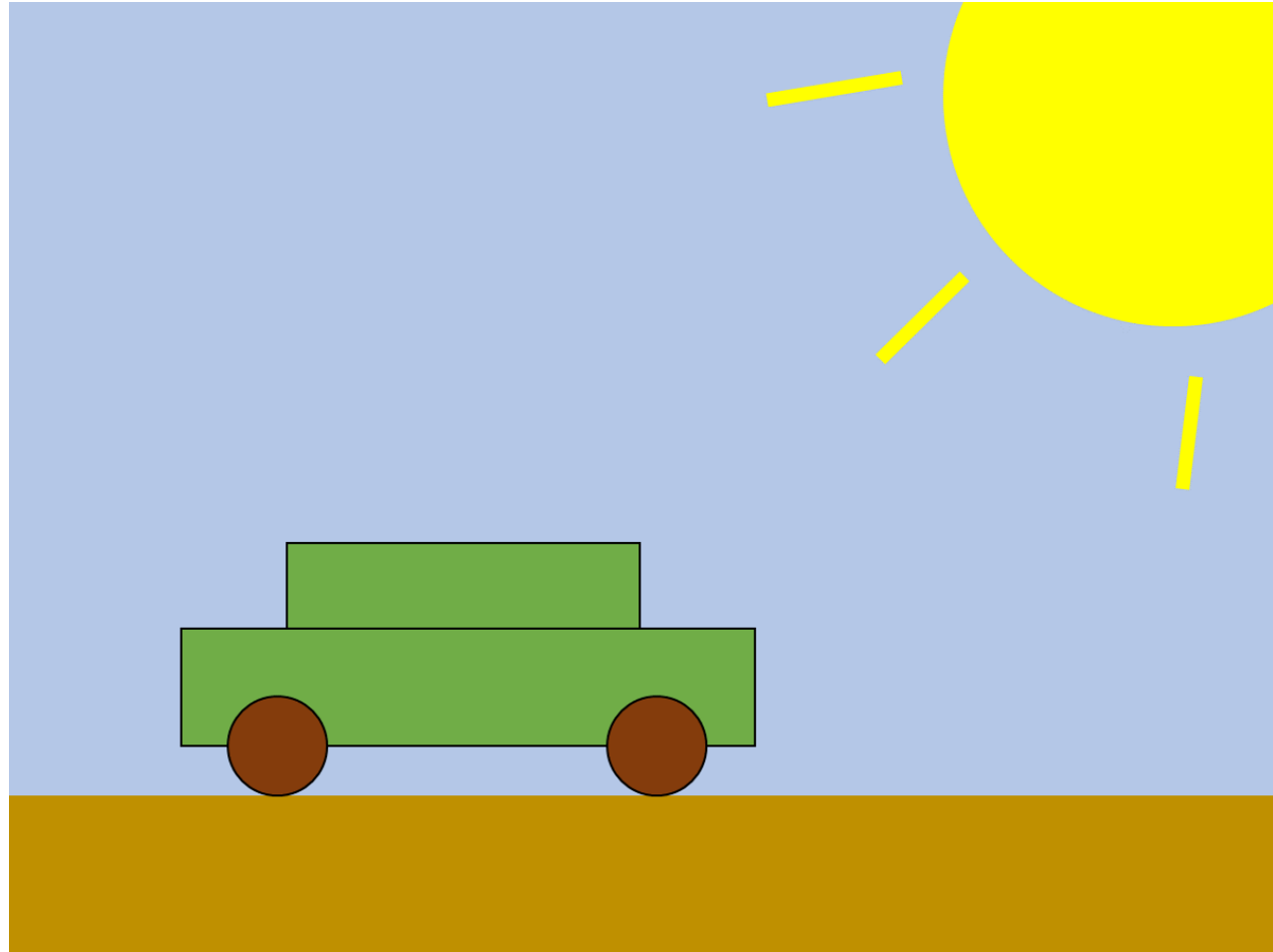
Car

Type-in JavaScript Program

```
// Background
noStroke();
fill(180, 199, 231);
rect(0, 0, 800, 500);
fill(191, 144, 0);
rect(0, 500, 800, 600);

// Sun
fill("yellow");
circle(750, 50, 150);
stroke("yellow");
strokeWeight(6);
line(480, 60, 561, 47);
line(548, 224, 602, 172);
line(740, 304, 747, 236);

// Car
stroke("black");
strokeWeight(1);
fill(112, 173, 71);
rect(175, 340, 223, 54);
rect(108, 394, 362, 74);
fill(132,60,12);
circle(168, 468, 32);
circle(408, 468, 32);
```



1

Open Code Editor page
codeguppy.com/hoc.html

2

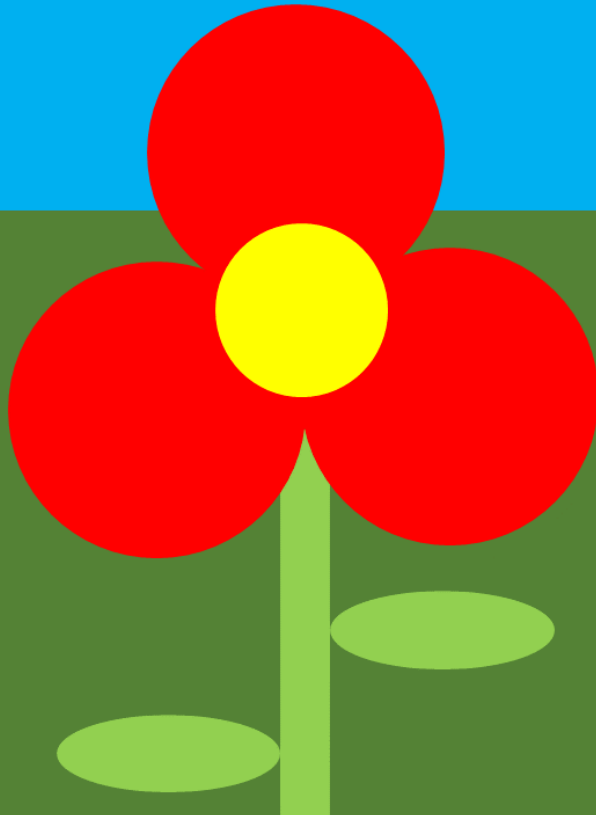
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Flower

Type-in JavaScript Program



```
// Background
noStroke();
fill(0, 176, 240);
rect(0, 0, 800, 200);
fill(84, 130, 53);
rect(0, 200, 800, 600);

// Stem
fill(146, 208, 80);
rect(277, 313, 30, 237);
ellipse(215, 514, 124, 46);
ellipse(374, 438, 134, 46 );

// Flower
fill("red");
circle(290, 160, 87);
circle(209, 314, 87);
circle(377, 307, 87);
fill("yellow");
circle(290, 260, 46);
```

1

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2

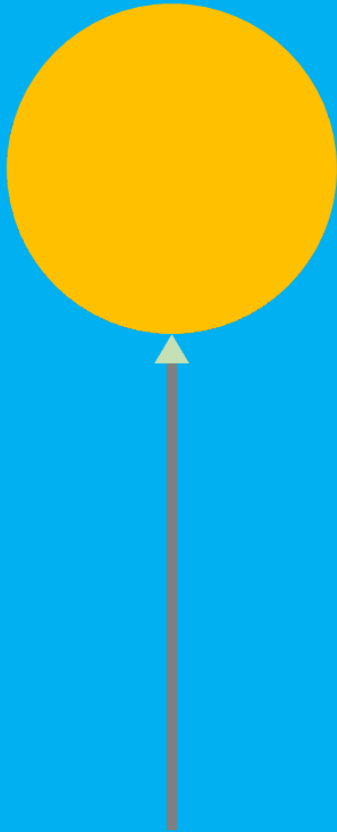
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Balloon

Type-in JavaScript Program



```
background("#00b0f0");  
  
// String  
stroke("#7f7f7f");  
strokeWeight(3);  
line(263, 280, 263, 548);  
  
// Balloon  
noStroke();  
fill("#ffc000");  
triangle(255, 289,  
         263, 272,  
         271, 289);  
circle(263, 172, 100);
```

1

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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Snowman

Type-in JavaScript Program

```
background("#8faadc");

// Right hand
stroke("#843c0c");
strokeWeight(10);
line(604, 359, 495, 291);
line(604, 359, 607, 378);
line(604, 359, 627, 367);
line(604, 359, 627, 355);

// Body
stroke("#335693");
strokeWeight(1);
fill("white");
circle(400, 445, 126);
circle(400, 285, 99);
circle(400, 151, 68);

// Eyes
fill("black");
noStroke();
circle(366, 124, 10);
circle(428, 124, 10);
```

```
// Mouth
circle(362, 179, 6);
circle(379, 197, 6);
circle(403, 201, 6);
circle(428, 199, 6);

// Buttons
circle(407, 267, 10);
circle(407, 320, 10);
circle(407, 433, 10);
circle(407, 502, 10);

// Nose and hat
fill("#ffc000");
triangle(397, 161, 401, 176, 483, 146);
fill("#c55a11");
triangle(321, 125, 353, 39, 434, 73);

// Left hand
stroke("#843c0c");
strokeWeight(10);
line(225, 168, 323, 265);
line(225, 168, 196, 171);
line(225, 168, 201, 157);
line(225, 168, 216, 135);
```



1

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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

House

Type-in JavaScript Program



```
// Background
noStroke();
fill("#00b0f0");
rect(0, 0, 800, 400);
fill("#548235");
rect(0, 400, 800, 600);

fill("#ffc740");
rect(109, 254, 325, 274);

// Left window
stroke("#c55a11");
strokeWeight(3);
fill("#dae3f3");
square(147, 302, 56);
line(175, 302, 175, 358);
line(147, 330, 203, 330);

// Right window
square(347, 302, 56);
line(375, 302, 375, 358);
line(347, 330, 403, 330);
```

```
// Door
strokeWeight(1);
fill("#ed7d31");
rect(229, 417, 90, 110);
fill("#bfbfbf");
circle(305, 471, 8);

// Horn
noStroke();
fill("#843c0c");
rect(174, 117, 24, 80);

// Roof
fill("#ed7d31");
triangle(109, 254, 272, 75, 434, 254);

// Sun
fill("yellow");
circle(750, 50, 150);
stroke("yellow");
strokeWeight(6);
line(480, 60, 561, 47);
line(548, 224, 602, 172);
line(740, 304, 747, 236);
```

1

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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

House 2

Type-in JavaScript Program



```
// Background
noStroke();
fill("#8faadc");
rect(0, 0, 800, 300);
fill("#548235");
rect(0, 300, 800, 600);

// Tree
fill("#843c0c");
rect(104, 240, 28, 190);
fill("#548235");
ellipse(119, 139, 172, 229);
```

```
// House
fill("#ffc000");
rect(272, 260, 380, 227);

// Roof
fill("#843c0c");
triangle(252, 260, 460, 110, 670, 260);

// Left window
stroke("#c55a11");
strokeWeight(3);
fill("#dae3f3");
square(295, 287, 96);
line(343, 287, 343, 383);
line(295, 335, 391, 335);

// Right window
square(535, 287, 96);
line(583, 287, 583, 383);
line(535, 335, 631, 335);
```

```
// Door
fill("#c55a11");
rect(415, 330, 95, 155);

// Sun
fill("#ffc000");
stroke("#ffc000");
circle(700, 100, 32);
line(631, 100, 658, 100);
line(659, 43, 673, 59);
line(729, 61, 743, 42);
line(750, 106, 770, 106);
line(729, 141, 742, 155);
line(674, 139, 660, 155);
```

1

Open Code Editor page
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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Square Tree

Type-in JavaScript Program



```
noStroke();

// Background
fill("#aac6e7");
rect(0, 0, 800, 400);
fill("#c5e0b4");
rect(0, 400, 800, 600);

// Trunk
fill("#843c0c");
rect(212, 330, 120, 190);

// Leaves
fill("#548235");
rect(255, 158, 300, 220);
fill("#00b050");
rect(57, 197, 230, 150);
fill("#92d050");
rect(130, 55, 230, 190);
```

1

Open Code Editor page
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2

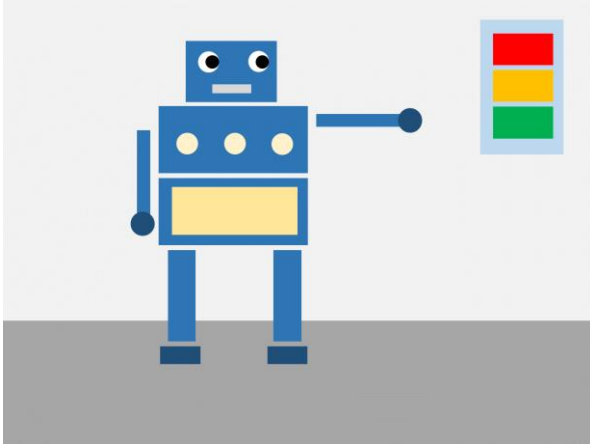
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Robot

Type-in JavaScript Program



```
noStroke();  
  
// Background  
fill("#efefef");  
rect(0, 0, 800, 430);  
fill("#a7a7a7");  
rect(0, 430, 800, 600);  
  
// Head and body  
fill("#2e75b6");  
rect(249, 54, 122, 83);  
rect(211, 142, 200, 90);  
rect(211, 240, 200, 90);
```

```
// Legs  
rect(224, 338, 36, 124);  
rect(368, 338, 36, 124);  
  
// Arms  
rect(182, 176, 16, 118);  
rect(426, 155, 118, 16);  
  
// Feet and hands  
fill("#1f4e79");  
rect(214, 468, 55, 25);  
rect(359, 468, 55, 25);  
circle(190, 300, 15);  
circle(553, 162, 15);  
  
// Eyes  
fill("white");  
circle(278, 83, 14);  
circle(347, 83, 14);  
fill("black");  
circle(283, 83, 9);  
circle(352, 83, 9);
```

```
// Mouth  
fill("#d8d8d8");  
rect(285, 113, 53, 13);  
  
// Decorations  
fill("#fff2cc");  
circle(250, 195, 12);  
circle(315, 195, 12);  
circle(380, 195, 12);  
fill("#ffe699");  
rect(230, 250, 165, 65);  
  
// Lights  
fill("#bdd7ee");  
rect(638, 28, 104, 175);  
fill("red");  
rect(650, 45, 80, 42);  
fill("#ffc000");  
rect(650, 95, 80, 42);  
fill("#00b050");  
rect(650, 145, 80, 42);
```

1

Open Code Editor page
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2

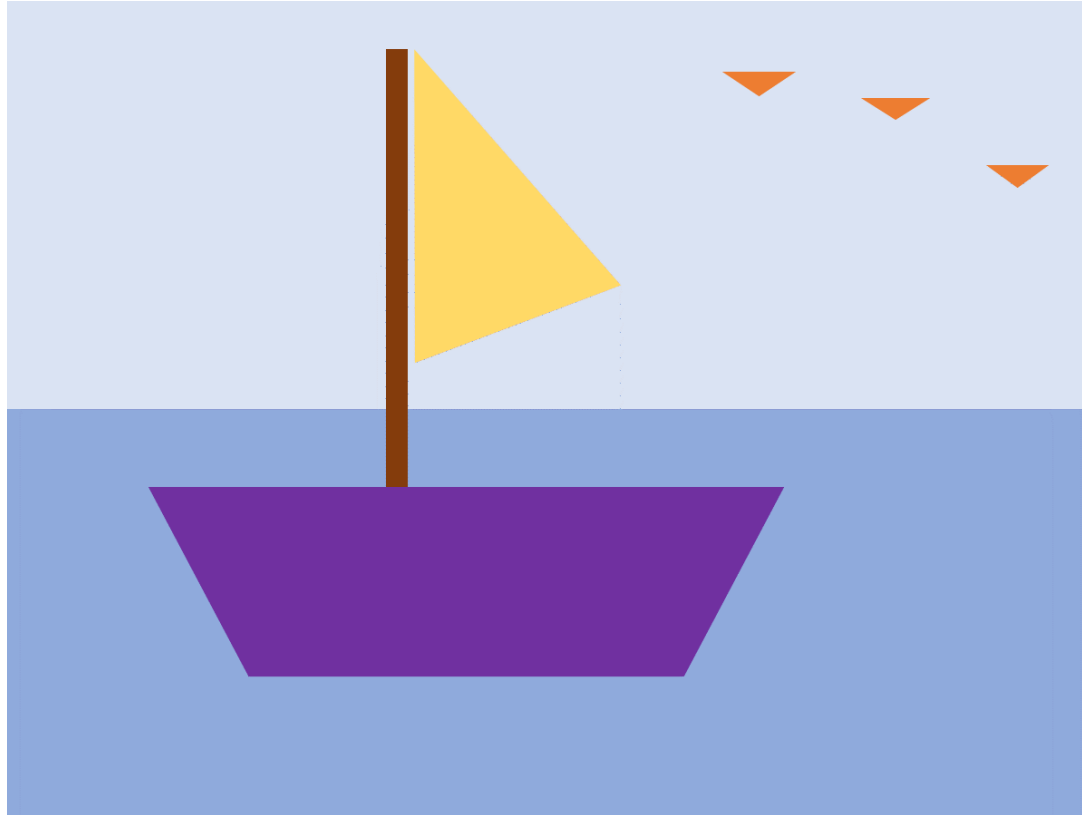
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Boat

Type-in JavaScript Program



```
noStroke();

// Background
fill("#dae3f3");
rect(0, 0, 800, 300);
fill("#8faadc");
rect(0, 300, 800, 600)

// Mast
fill("#843c0c");
rect(280, 36, 16, 321);
fill("#ffd966");
triangle(300, 36, 450, 207, 300, 264);

// Boat
fill("#7030a0");
rect(178, 357, 319, 140);
triangle(105, 357, 178, 357, 178, 497);
triangle(573, 357, 497, 497, 497, 357);

// Birds
fill("#ed7d31");
triangle(529, 52, 578, 52, 553, 67);
triangle(631, 71, 677, 71, 654, 85);
triangle(722, 121, 766, 121, 743, 135);
```

1

Open Code Editor page
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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Smiley

Type-in JavaScript Program



```
noStroke();  
background("#548235");  
  
fill("#ffc000");  
circle(400, 300, 200);  
  
fill("black");  
circle(314, 206, 25);  
circle(504, 206, 25);  
  
fill("#c00000");  
arc(400, 340, 238, 196, 0, 180);
```

1

Open Code Editor page
codeguppy.com/hoc.html

2

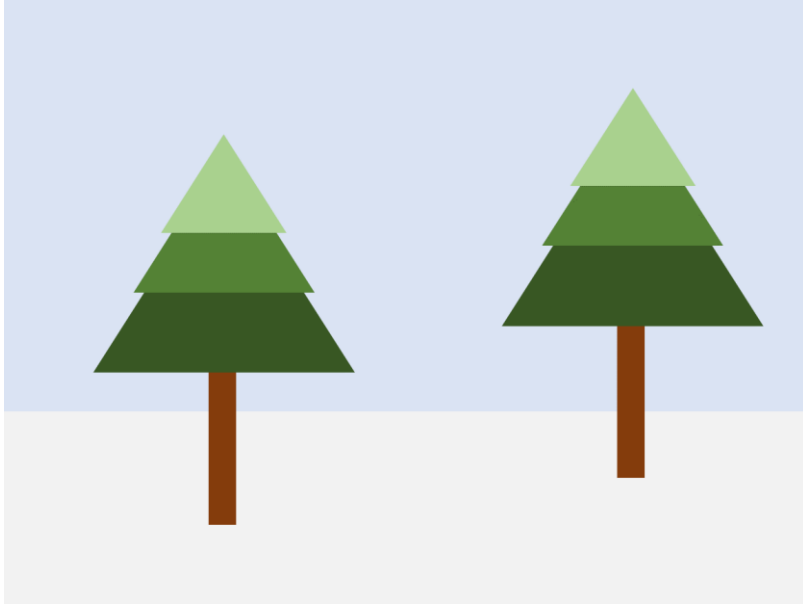
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Pine Trees

Type-in JavaScript Program



```
noStroke();

// Background
fill("#dae3f3");
rect(0, 0, 800, 400);
fill("#f2f2f2");
rect(0, 400, 800, 200);

// First tree
fill("#843c0c");
rect(205, 368, 26, 151);
fill("#385723");
triangle(220, 165, 90, 370, 350, 370);
fill("#538234");
triangle(220, 149, 130, 290, 309, 290);
fill("#a9d18e");
triangle(220, 134, 158, 230, 281, 230);

// Second tree
fill("#843c0c");
rect(205+405, 368-45, 26, 151);
fill("#385723");
triangle(220+405, 165-45, 90+405, 370-45, 350+405, 370-45);
fill("#538234");
triangle(220+405, 149-45, 130+405, 290-45, 309+405, 290-45);
fill("#a9d18e");
triangle(220+405, 134-45, 158+405, 230-45, 281+405, 230-45);
```

1

Open Code Editor page
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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Mushroom

Type-in JavaScript Program



```
noStroke();

// Background
fill("#a9d18e");
rect(0, 0, 800, 400);
fill("#843c0c");
rect(0, 400, 800, 200);

// Mushroom
fill("#ffc000");
rect(328, 314, 72, 212);
fill("#c00000");
arc(365, 314, 386, 396, 180, 360);
fill("white");
circle(245, 271, 20);
circle(285, 195, 18);
circle(341, 167, 12);
circle(423, 171, 14);
circle(491, 233, 14);
circle(335, 249, 13);
circle(393, 220, 22);
circle(443, 279, 23);
```

1

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2

Type-in the above program
in the Code Editor

3

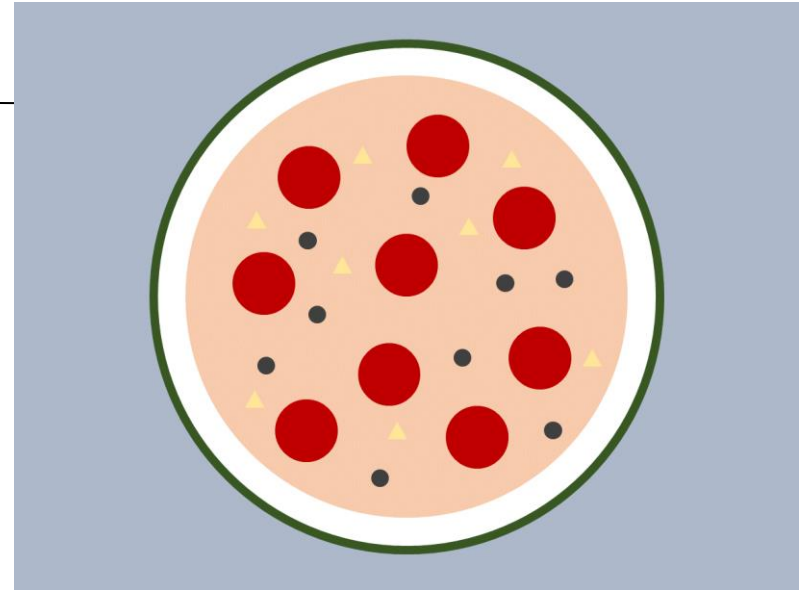
Press "Run"
and enjoy!

Pizza

Type-in JavaScript Program

```
noStroke();  
background("#adb9ca");  
  
// Plate and pizza  
fill("#385723");  
circle(400, 300, 260);  
fill("white");  
circle(400, 300, 254);  
fill("#f7c9ab");  
circle(400, 300, 225);  
  
// Pepperoni  
fill("#c00000");  
circle(300, 180, 30);  
circle(433, 150, 30);  
circle(521, 221, 30);  
circle(536, 365, 30);  
circle(469, 445, 30);  
circle(296, 439, 30);  
circle(256, 289, 30);  
circle(399, 268, 30);  
circle(385, 381, 30);
```

```
// Olives  
fill("#404040");  
circle(257, 370, 9);  
circle(309, 319, 9);  
circle(300, 243, 9);  
circle(415, 196, 9);  
circle(501, 286, 9);  
circle(563, 282, 9);  
circle(457, 362, 9);  
circle(373, 485, 9);  
circle(257, 370, 9);  
circle(550, 435, 9);  
  
// Pineapple  
fill("#ffe699");  
triangle(249, 212, 239, 229, 259, 229);  
triangle(357, 144, 347, 161, 367, 161);  
triangle(508, 150, 498, 167, 518, 167);  
triangle(337, 258, 327, 275, 347, 275);  
triangle(465, 219, 455, 236, 475, 236);  
triangle(391, 427, 381, 444, 401, 444);  
triangle(590, 353, 580, 370, 600, 370);  
triangle(438, 481, 428, 498, 448, 498);  
triangle(246, 395, 236, 412, 256, 412);
```



1

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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Mouse

Type-in JavaScript Program



```
background("#a6cf87");
noStroke();

// Head and ears
fill("#c55a11");
triangle(242, 192, 556, 192, 400, 500);
circle(272, 171, 85);
circle(542, 171, 85);
fill("#242424");
triangle(347, 395, 453, 395, 400, 500);

// Eyes
fill("white");
circle(344, 260, 25);
circle(455, 260, 25);
fill("black");
circle(355, 268, 8);
circle(448, 268, 8);

// Whiskers
stroke("#242424");
strokeWeight(3);
line(282, 403, 345, 427);
line(287, 485, 345, 462);
line(450, 427, 502, 416);
line(442, 455, 504, 486);
```

1

Open Code Editor page
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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Train

Type-in JavaScript Program

```
// Background
noStroke();
fill("#8faadc");
rect(0, 0, 800, 340);
fill("#a9d18e");
rect(0, 340, 800, 260);

// Main part
fill("#c55a11");
triangle(127, 428, 252, 428, 252, 300);
rect(502, 215, 175, 213);
rect(283, 258, 14, 42);
fill("#ffc000");
rect(252, 300, 250, 128);

// Windows
fill("#f8cbad");
rect(523, 236, 55, 58);
rect(584, 236, 74, 58);
rect(523, 300, 135, 96);
```



```
// Wheels
fill("#262626");
circle(260, 454, 38);
circle(598, 454, 38);
fill("#d9d9d9");
circle(260, 454, 19);
circle(598, 454, 19);
fill("#262626");
rect(249, 443, 344, 10);

// Road and smoke
fill("#3b3838");
rect(0, 492, 800, 28);
fill("#f2f2f2");
ellipse(316, 209, 29, 20);
ellipse(377, 166, 46, 32);
ellipse(442, 114, 68, 47);
```

1

Open Code Editor page
codeguppy.com/hoc.html

2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

City

Type-in JavaScript Program

```
// Background
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 400);
fill("#548235");
rect(0, 400, 800, 100);
fill("#a5a5a5");
rect(0, 500, 800, 100);
```

```
// Building 1
stroke(1);
fill("#e254d4");
rect(67, 272, 197, 228);
fill("#21e7cf");
rect(84, 292, 48, 36);
rect(143, 292, 48, 36);
rect(201, 292, 48, 36);
rect(84, 347, 48, 36);
rect(143, 347, 48, 36);
rect(201, 347, 48, 36);
fill("#934bc9");
rect(132, 425, 27, 75);
rect(159, 425, 27, 75);
rect(186, 425, 27, 75);
```



```
// Building 2
fill("#bf9000");
rect(264, 187, 106, 313);
fill("#21e7cf");
circle(320, 248, 23);
square(292, 287, 13);
square(314, 287, 13);
square(337, 287, 13);
square(292, 314, 13);
square(314, 314, 13);
square(337, 314, 13);
square(292, 339, 13);
square(314, 339, 13);
square(337, 339, 13);
fill("#c55a11");
arc(320, 464, 45, 35, 180, 360);
rect(297, 464, 45, 36);
```

```
// Building 3
fill("#934bc9");
rect(370, 322, 80, 178);
fill("#21e7cf");
rect(379, 333, 63, 12);
rect(379, 354, 63, 12);
rect(379, 376, 63, 12);
fill("#4472c4");
rect(388, 465, 46, 35);
```

```
// Building 4
fill("#d44316");
rect(450, 142, 150, 358);
fill("#21e7cf");
rect(474, 171, 24, 160);
rect(521, 171, 24, 160);
rect(562, 171, 24, 160);
fill("#4472c4");
rect(495, 434, 37, 66);
rect(532, 434, 37, 66);
```

```
// Tree
noStroke();
fill("#843c0c");
rect(705, 370, 10, 50);
fill("#385723");
triangle(709, 291, 679, 370, 738, 370);
```

1

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2

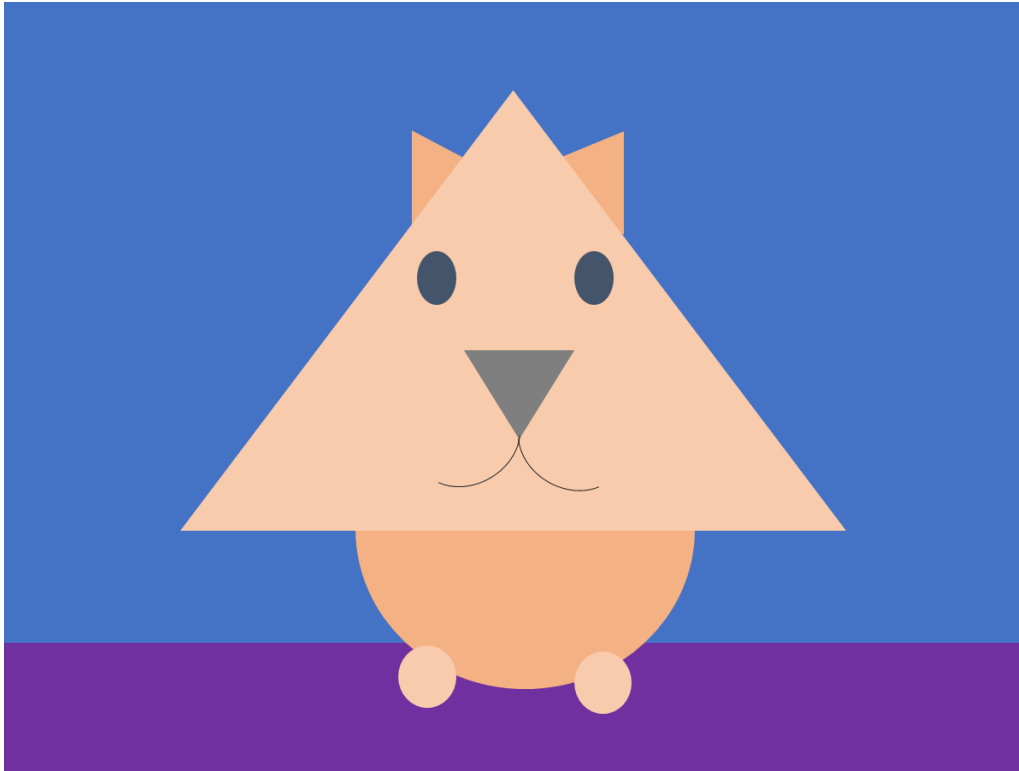
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Cat

Type-in JavaScript Program



```
// Background
noStroke();
fill("#4472c4");
rect(0, 0, 800, 500);
fill("#7030a0");
rect(0, 500, 800, 1000);

// Ears and body
fill("#f4b183");
triangle(318, 99, 318, 175, 359, 121);
triangle(483, 99, 483, 184, 435, 121);
circle(397, 415, 120);

// Head and feet
fill("#f8cbad");
triangle(397, 69, 138, 410, 655, 410);
circle(332, 525, 25);
circle(468, 525, 25);

// Eyes
fill("#44546a");
ellipse(339, 215, 29, 40);
ellipse(461, 215, 29, 40);

// Nose
fill("#7f7f7f");
triangle(360, 270, 440, 270, 402, 339);
noFill();
stroke("#7f7f7f");
arc(447, 338, 90, 68, 45, 180);
arc(357, 338, 90, 68, 0, 135);
```

1

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2

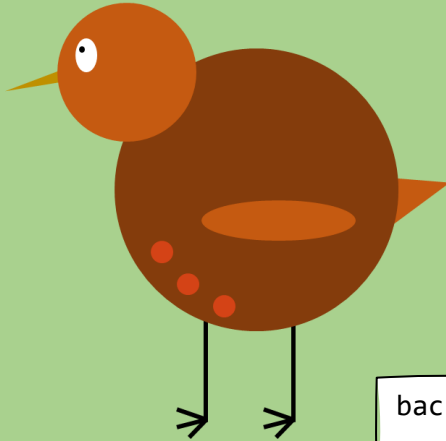
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Bird

Type-in JavaScript Program



```
background("#a9d18e");

// Legs
strokeWeight(4);
stroke("Black");
line(380, 407, 380, 500);
line(380, 500, 355, 493);
line(380, 500, 354, 508);
line(380, 500, 365, 518);
line(460, 412, 460, 500);
line(460, 500, 434, 492);
line(460, 500, 434, 509);
line(460, 500, 445, 517);
```

```
// Tail and body
noStroke();
fill("#c55a11");
triangle(554, 280, 603, 284, 551, 323);
fill("#843c0c");
circle(426, 291, 130);
fill("#c55a11");
ellipse(447, 318, 142, 39);
fill("#d44316");
circle(339, 348, 10);
circle(364, 377, 10);
circle(397, 398, 10);

// Head
fill("#bf9000");
triangle(196, 199, 245, 180, 246, 190);
fill("#c55a11");
circle(308, 181, 64);
fill("White");
ellipse(270, 167, 20, 31);
fill("Black");
circle(267, 162, 4);
```

1

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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Type-in JavaScript Program



```
// Background
noStroke();
background("#bdd7ee");
fill("#548235");
rect(0, 500, 800, 100);
```

```
// Sun
fill("#ffd966");
circle(77, 67, 46);
triangle(67, 130, 82, 129, 81, 185);
triangle(127, 109, 136, 97, 176, 136);
triangle(145, 53, 143, 37, 200, 35);
```

```
// House
fill("#ffc000");
rect(150, 397, 554, 103);
fill("#d44316");
rect(150, 252, 554, 145);
fill("#ed7d31");
triangle(134, 252, 428, 153, 720, 252);
fill("#934bc9");
triangle(506, 252, 612, 130, 720, 252);

// Porch
fill("#00b0f0");
rect(357, 397, 15, 113);
rect(481, 397, 15, 113);
rect(405, 438, 48, 62);
fill("#0070c0");
triangle(335, 397, 427, 316, 520, 397);

// Windows
fill("#c5e0b4");
rect(200, 423, 87, 50);
rect(581, 423, 87, 50);
fill("#f8cbad");
rect(218, 282, 50, 86);
rect(601, 282, 50, 86);
rect(403, 277, 47, 27);
fill("#e254d4");
circle(614, 206, 23);
```

1

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2

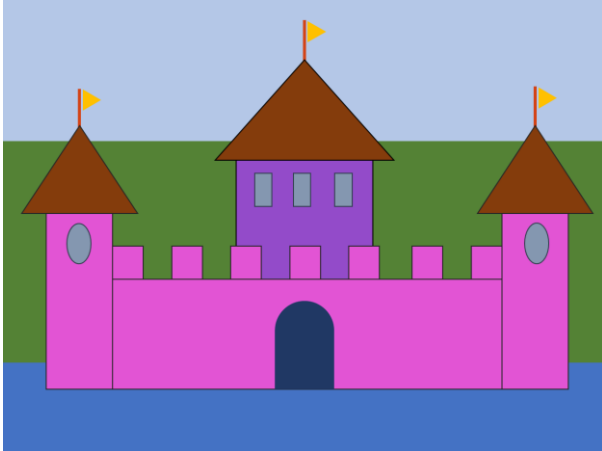
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Castle

Type-in JavaScript Program



```
// Background
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 187);
fill("#548235");
rect(0, 187, 800, 296);
fill("#4472c4");
rect(0, 483, 800, 117);

// Castle walls
stroke("black");
fill("#e254d4");
rect(57, 284, 88, 233);
rect(145, 371, 517, 146);
rect(662, 284, 88, 233);
fill("#934bc9");
rect(310, 214, 182, 157);
fill("#e254d4");
rect(145, 328, 39, 43);
rect(224, 328, 39, 43);
rect(303, 328, 39, 43);
rect(381, 328, 39, 43);
rect(459, 328, 39, 43);
rect(543, 328, 39, 43);
rect(623, 328, 39, 43);
```

```
// Windows
fill("#8497b0");
ellipse(101, 325, 32, 55);
ellipse(709, 325, 32, 55);
rect(335, 230, 22, 43);
rect(386, 230, 22, 43);
rect(440, 230, 22, 43);

// Roof
fill("#843c0c");
triangle(25, 284, 101, 167, 179, 284);
triangle(281, 215, 401, 81, 519, 215);
triangle(630, 285, 706, 167, 783, 285);

// Flags
strokeWeight(4);
stroke("#d44316");
line(101, 119, 101, 167);
line(401, 27, 401, 81);
line(706, 115, 706, 167);
noStroke();
fill("#ffc000");
triangle(107, 146, 107, 119, 130, 132);
triangle(405, 56, 405, 27, 427, 43);
triangle(711, 142, 711, 115, 743, 131);

// Door
fill("#203864");
rect(362, 433, 78, 84);
arc(401, 433, 78, 65, 180, 360);
```

1

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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Bear

Type-in JavaScript Program



```
background("#b4c7e7");

// Head and ears
noStroke();
fill("#843c0c");
circle(281, 137, 56);
circle(527, 137, 56);
fill("#c55a11");
circle(406, 300, 162);

// Eyes
fill("white");
circle(346, 224, 31);
circle(485, 224, 31);
fill("black");
circle(358, 240, 11);
circle(473, 240, 11);

// Nose and mouth
fill("#843c0c");
circle(406, 395, 68);
fill("#bcb9b6");
rect(406, 369, 3, 94);
fill("black");
circle(406, 349, 22);

// Garment
fill("#548235");
triangle(257, 509, 257, 420, 403, 465);
triangle(561, 508, 561, 422, 413, 465);
fill("#21e7cf");
circle(407, 465, 8);
```

1

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2

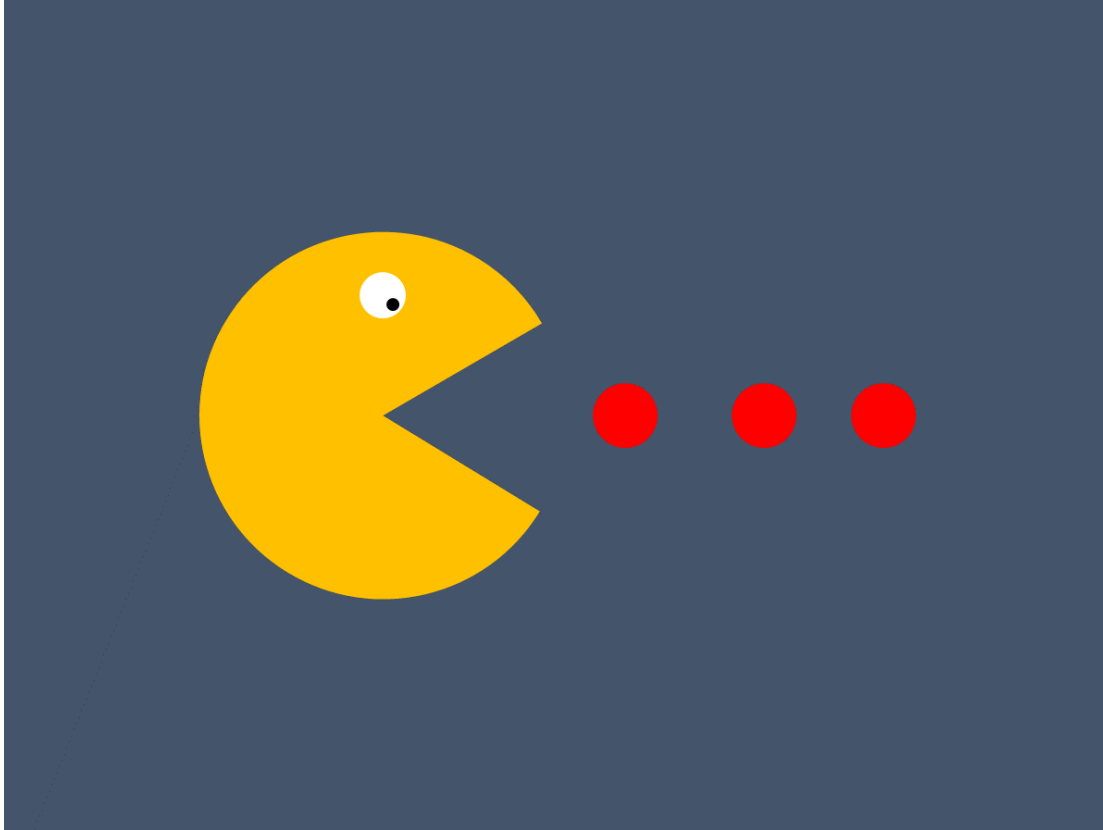
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Pac Man

Type-in JavaScript Program



```
background("#44546a");
noStroke();

// Pacman
fill("#ffc000");
arc(270, 300, 264, 264, 30, 330);

// Eye
fill("white");
circle(272, 213, 16);
fill("black");
circle(280, 219, 5);

// Food
fill("red");
circle(448, 300, 24);
circle(548, 300, 24);
circle(648, 300, 24);
```

1

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2

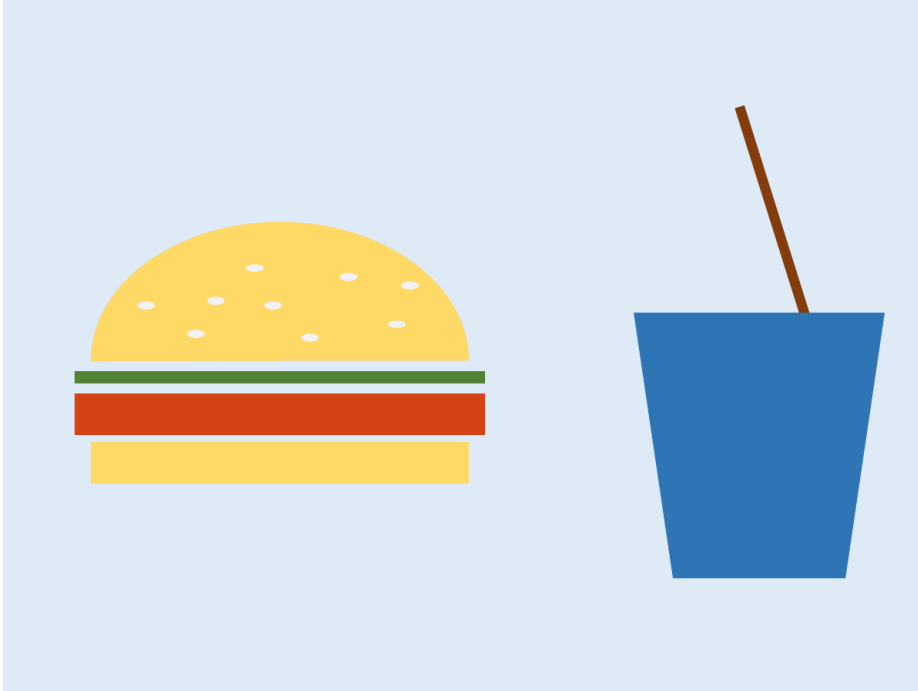
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Fast Food

Type-in JavaScript Program



```
background("#deebf7");  
noStroke();
```

```
// Bun  
fill("#ffd966");  
arc(245, 311, 327, 238, 180, 360);  
rect(80, 380, 325, 33);
```

```
// Salad and meat  
fill("#548235");  
rect(63, 320, 355, 9);  
fill("#d44316");  
rect(63, 340, 355, 35);
```

```
// Seeds  
fill("white");  
ellipse(124, 263, 15, 7);  
ellipse(167, 288, 15, 7);  
ellipse(185, 259, 15, 7);  
ellipse(218, 231, 15, 7);  
ellipse(234, 263, 15, 7);  
ellipse(266, 291, 15, 7);  
ellipse(299, 238, 15, 7);  
ellipse(340, 279, 15, 7);  
ellipse(353, 245, 15, 7);  
  
// Drink  
strokeWeight(4);  
stroke("#843c0c");  
line(638, 93, 695, 274);  
noStroke();  
fill("#2e75b6");  
rect(571, 269, 148, 230);  
triangle(538, 269, 571, 269, 571, 499);  
triangle(719, 269, 719, 499, 752, 269);
```

1

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2

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in the Code Editor

3

Press "Run"
and enjoy!

Dog

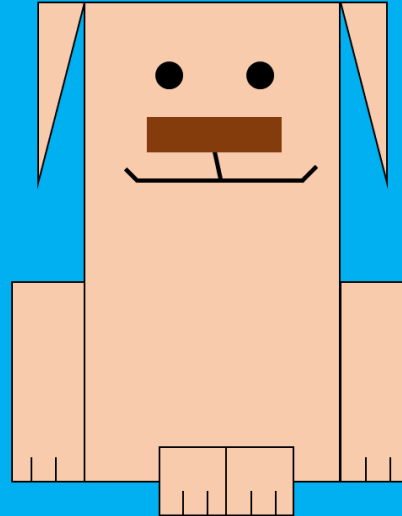
Type-in JavaScript Program

```
background("#00b0f0");

// Head, body and ears
fill("#f8cbad");
rect(315, 95, 200, 380);
triangle(279, 95, 315, 95, 279, 240);
triangle(515, 95, 551, 95, 551, 240);

// Back legs
rect(257, 315, 58, 160);
line(274, 454, 274, 475);
line(293, 454, 293, 475);
rect(515, 315, 58, 160);
line(538, 454, 538, 475);
line(557, 454, 557, 475);

// Front legs
rect(375, 445, 52, 55);
line(393, 481, 393, 499);
line(412, 481, 412, 499);
rect(375 + 52, 445, 52, 55);
line(393 + 52, 481, 393 + 52, 499);
line(412 + 52, 481, 412 + 52, 499);
```



```
// Mouth, nose, eyes
strokeWeight(3);
line(347, 226, 356, 235);
line(356, 235, 487, 235);
line(487, 235, 498, 224);
line(423, 235, 417, 211);
noStroke();
fill("#843c0c");
rect(364, 185, 106, 27);
fill("black");
circle(382, 152, 11);
circle(454, 152, 11);
```

1

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2

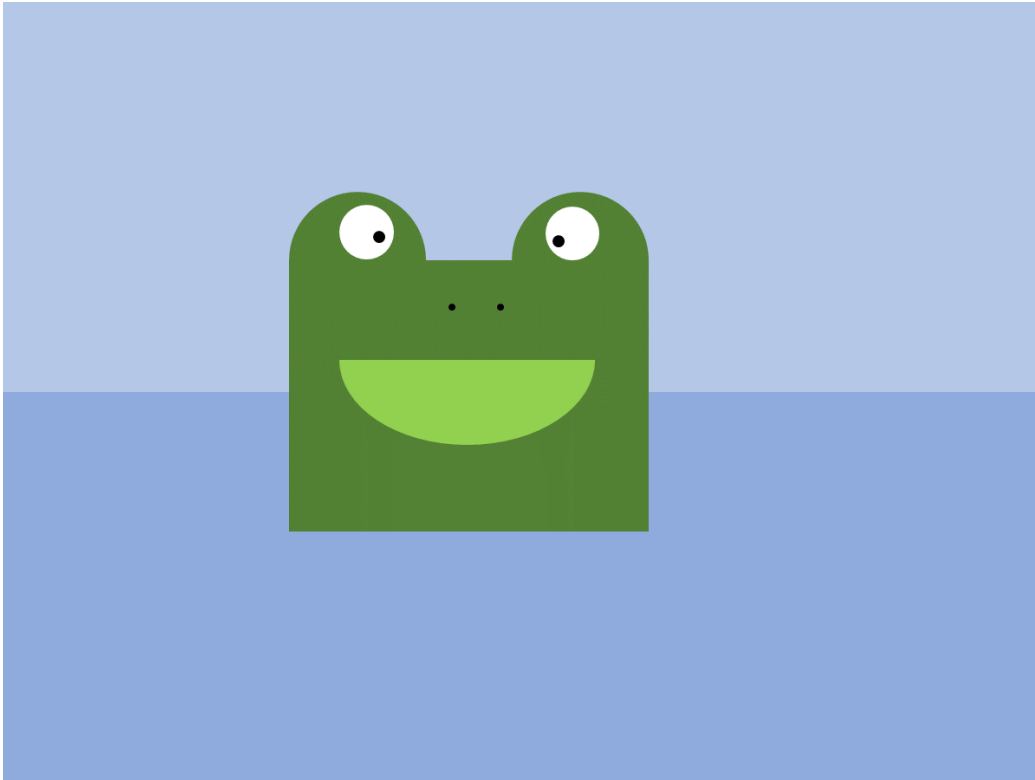
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

Frog

Type-in JavaScript Program



```
// Background
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 300);
fill("#8faadc");
rect(0, 300, 800, 600);

// Body and eyes
fill("#548235");
rect(220, 200, 276, 206);
arc(274, 200, 108, 108, 180, 360);
arc(442, 200, 108, 108, 180, 360);
fill("white");
circle(279, 176, 21);
circle(437, 176, 21);
fill("black");
circle(289, 180, 6);
circle(428, 183, 6);

// Nose and mouth
circle(345, 233, 3);
circle(382, 233, 3);
fill("#92d050");
arc(358, 274, 197, 134, 0, 180);
```

1

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2

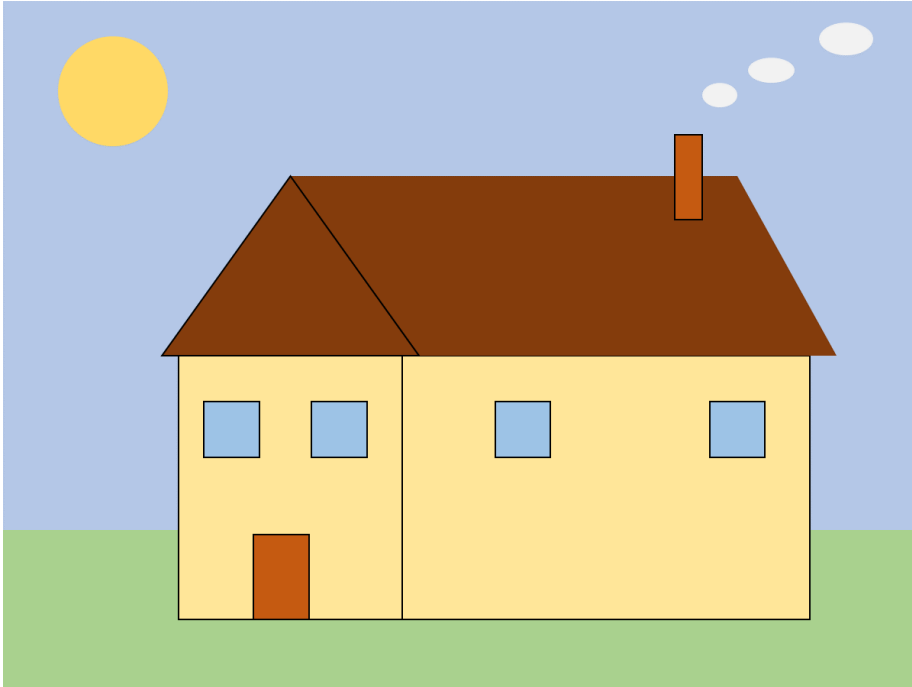
Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

House 3

Type-in JavaScript Program



```
// Background and sun
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 460);
fill("#a9d18e");
rect(0, 460, 800, 140);
fill("#ffd966");
circle(98, 82, 48);
```

```
// Walls
stroke("black");
fill("#ffe699");
rect(153, 309, 195, 232);
rect(348, 309, 355, 232);
```

```
// Door and windows
fill("#c55a11");
rect(219, 464, 51, 77);
fill("#9dc3e6");
square(175, 348, 48);
square(270, 348, 48);
square(430, 348, 48);
square(617, 348, 48);

// Roof
fill("#843c0c");
noStroke();
rect(251, 152, 389, 157);
triangle(640, 152, 640, 309, 728, 309);
stroke("black");
triangle(251, 152, 139, 309, 363, 309);

// Horn and smoke
fill("#c55a11");
rect(587, 116, 24, 75);
fill("#f2f2f2");
noStroke();
ellipse(624, 80, 30, 21);
ellipse(671, 60, 40, 21);
ellipse(736, 32, 48, 28);
```

1

Open Code Editor page
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2

Type-in the above program
in the Code Editor

3

Press "Run"
and enjoy!

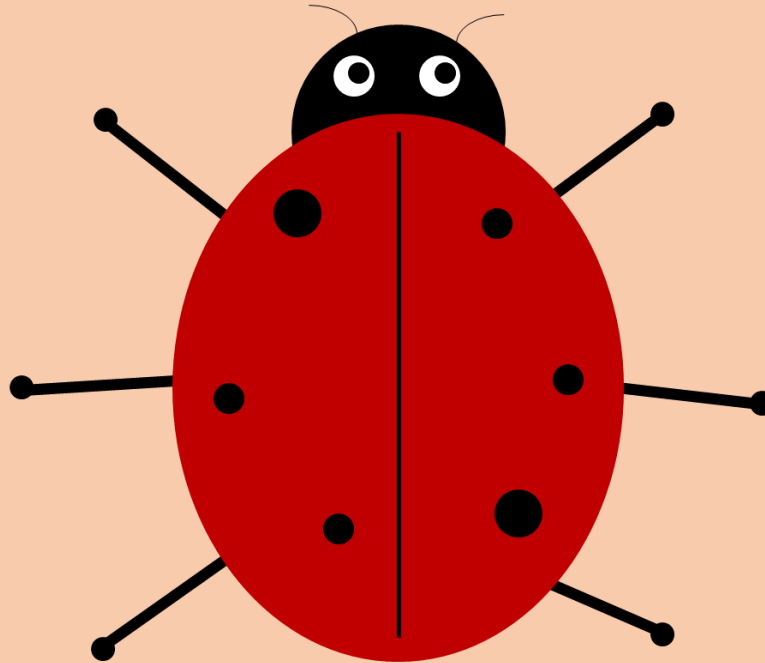
Ladybug

Type-in JavaScript Program

```
background("#f8cbad");

// Legs
strokeWeight(8);
fill("black");
line(203, 138, 299, 214);
circle(203, 138, 9);
line(139, 347, 259, 339);
circle(139, 347, 9);
line(199, 547, 302, 474);
circle(199, 547, 9);
line(634, 132, 548, 198);
circle(634, 132, 9);
line(711, 357, 601, 344);
circle(711, 357, 9);
line(634, 535, 548, 495);
circle(634, 535, 9);

// Head
noStroke();
circle(431, 146, 83);
fill("white");
circle(395, 102, 16);
circle(462, 102, 16);
fill("black");
circle(399, 100, 9);
circle(466, 100, 9);
```



```
// Antenas
stroke("black");
strokeWeight(1);
noFill();
arc(514, 77, 76, 44, 180, 270);
arc(360, 77, 76, 44, 270, 360);

// Body
fill("#c00000");
noStroke();
ellipse(431, 350, 351, 426);
strokeWeight(3);
stroke("black");
line(431, 157, 431, 537);
fill("black");
circle(351, 208, 19);
circle(297, 352, 11);
circle(383, 452, 13);
circle(505, 217, 14);
circle(562, 338, 11);
circle(522, 442, 19);
```

1

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2

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in the Code Editor

3

Press "Run"
and enjoy!

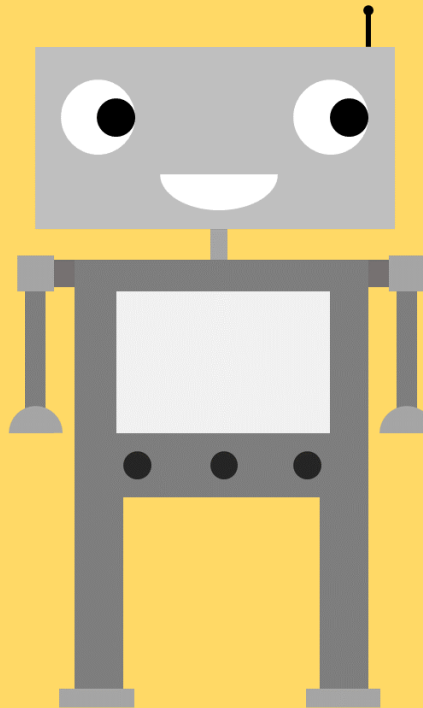
Robot 2

Type-in JavaScript Program

```
background("#ffd966");
noStroke();

// Head
fill("#bfbfbf");
rect(264, 63, 281, 141);
fill("white");
arc(404, 163, 91, 56, 0, 180);
circle(311, 117, 30);
circle(494, 117, 30);
fill("black");
circle(327, 117, 15);
circle(509, 117, 15);
rect(522, 38, 4, 25);
circle(524, 34, 8);
fill("#a5a5a5");
rect(401, 204, 13, 25);

// Body
fill("#808080");
rect(295, 229, 228, 185);
fill("#f2f2f2");
rect(327, 253, 167, 111);
fill("black");
circle(344, 389, 11);
circle(411, 389, 11);
circle(476, 389, 11);
```



```
// Legs
fill("#808080");
rect(295, 414, 37, 148);
rect(486, 414, 37, 148);
fill("#a4a4a4");
rect(283, 562, 57, 14);
rect(476, 562, 57, 14);

// Arms
fill("#767171");
rect(279, 229, 16, 20);
rect(523, 229, 16, 20);
fill("#7f7f7f");
rect(256, 253, 16, 93);
rect(546, 253, 16, 93);
fill("#a5a5a5");
rect(251, 225, 28, 28);
rect(539, 225, 28, 28);
arc(263, 364, 41, 42, 180, 360);
arc(554, 364, 41, 42, 180, 360);
```

1

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2

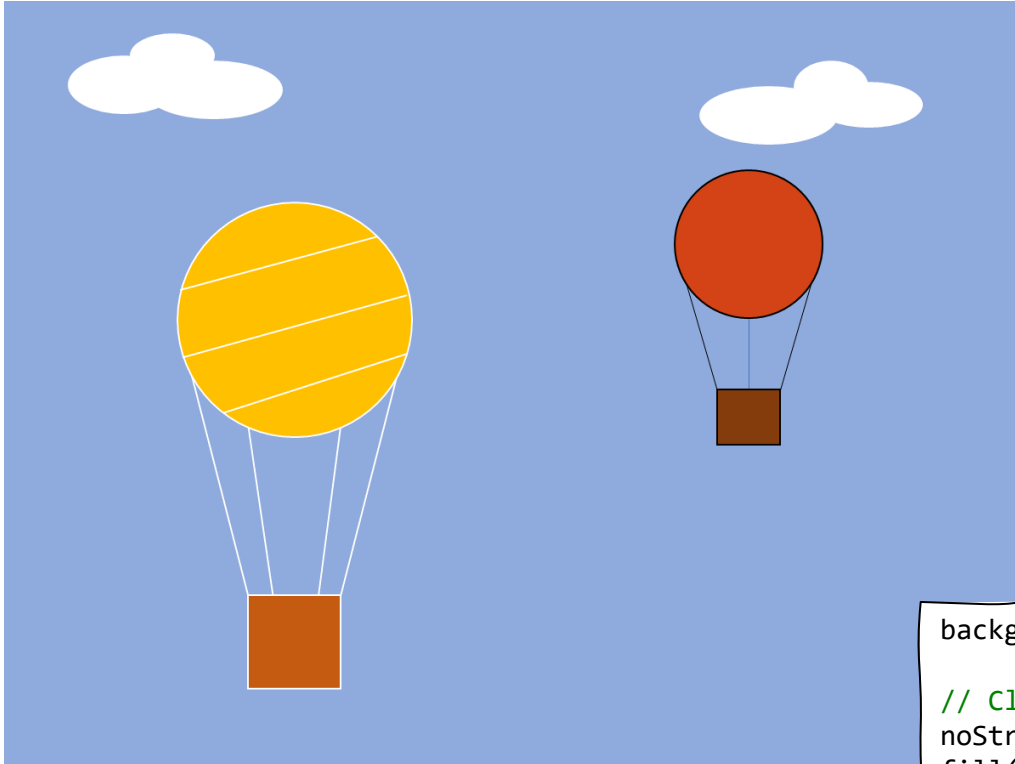
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in the Code Editor

3

Press "Run"
and enjoy!

Hot Air Balloons

Type-in JavaScript Program



```
background("#8faadc");
```

```
// Clouds
```

```
noStroke();
```

```
fill("white");
```

```
ellipse(94, 66, 80, 48);
```

```
ellipse(132, 42, 67, 34);
```

```
ellipse(169, 71, 110, 45);
```

```
ellipse(600, 89, 109, 47);
```

```
ellipse(650, 67, 60, 46);
```

```
ellipse(679, 80, 85, 36);
```

```
// Yellow balloon
```

```
strokeWeight(1);
```

```
stroke("white");
```

```
fill("#ffc000");
```

```
circle(227, 251, 93);
```

```
line(140, 225, 291, 184);
```

```
line(141, 287, 316, 229);
```

```
line(172, 324, 315, 276);
```

```
line(145, 296, 191, 465);
```

```
line(192, 337, 211, 465);
```

```
line(263, 337, 247, 465);
```

```
line(309, 295, 263, 465);
```

```
fill("#c55a11");
```

```
square(191, 465, 72);
```

```
// Red balloon
```

```
stroke("#101010");
```

```
fill("#d44316");
```

```
circle(584, 190, 58);
```

```
line(536, 223, 559, 303);
```

```
line(584, 248, 584, 303);
```

```
line(632, 221, 609, 303);
```

```
fill("#843c0c");
```

```
square(559, 303, 50);
```

1

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2

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in the Code Editor

3

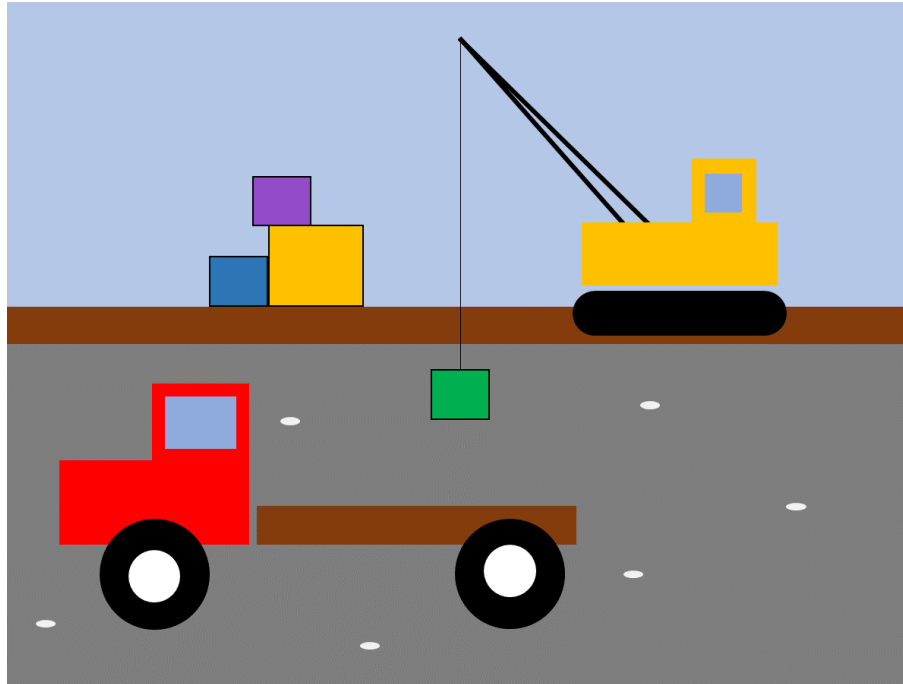
Press "Run"
and enjoy!

Trucks

Type-in JavaScript Program

```
// Background
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 267);
fill("#843c0c");
rect(0, 267, 800, 34);
fill("#7f7f7f");
rect(0, 301, 800, 299);
fill("#f1f1f1");
ellipse(33, 545, 18, 7);
ellipse(249, 367, 18, 7);
ellipse(320, 563, 18, 7);
ellipse(565, 352, 18, 7);
ellipse(551, 501, 18, 7);
ellipse(693, 441, 18, 7);
```

```
// Flatbed truck
fill("red");
rect(46, 401, 167, 74);
rect(127, 334, 86, 67);
fill("#8faadc");
rect(139, 346, 62, 45);
fill("#843c0c");
rect(219, 440, 281, 35);
fill("black");
circle(129, 502, 49);
circle(441, 502, 49);
fill("white");
circle(129, 502, 23);
circle(441, 502, 23);
```



```
// Crane truck
stroke("black");
strokeWeight(3);
line(399, 32, 540, 194);
line(399, 32, 563, 194);
strokeWeight(1);
line(399, 32, 399, 321);
noStroke();
fill("#ffc000");
rect(505, 193, 171, 55);
rect(602, 137, 57, 56);
fill("#8faadc");
rect(615, 150, 31, 32);
fill("black");
circle(512, 272, 19);
circle(670, 272, 19);
rect(512, 253, 158, 38);
```

```
// Packages
stroke("black");
fill("#00b050");
square(375, 321, 43);
fill("#2e75b6");
square(178, 223, 43);
fill("#ffc000");
square(221, 196, 70);
fill("#934bc9");
square(210, 153, 43);
```

1

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2

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in the Code Editor

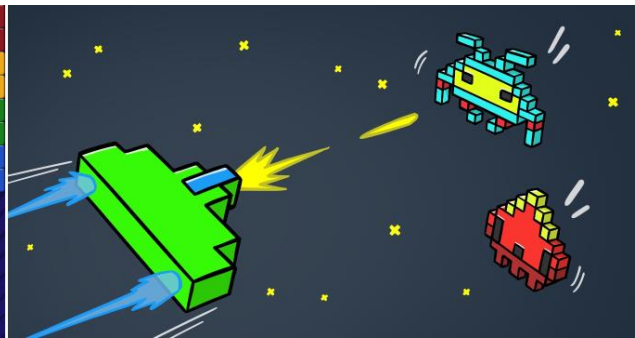
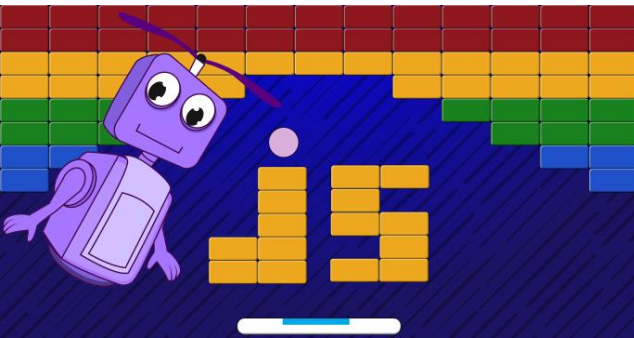
3

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<http://www.eyedrawit.com/tutorials/>

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