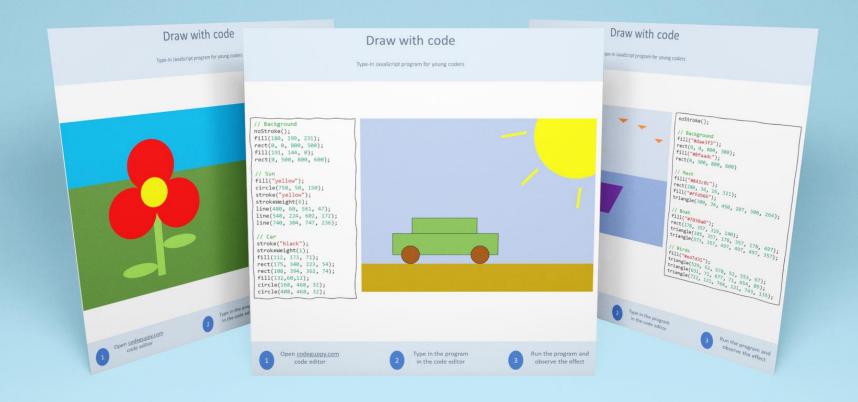
Desenează cu JavaScript

Progrămele de introdus de la tastatură



Pentru cine este această carte?

Această cărticică poate fi folosită atât de părinți cât și educatorii sau profesorii de informatică pentru introducerea copiilor in lumea minunată a programării.

Instrucțiuni de folosire

Înainte de a începe, asigurațivă că toți copiii au câte un cont gratuit deschis la codeguppy.com

- Tipăriți această carte și apoi distribuiți căte un program / pagină fiecărui copil din clasă sau din clubul de informatică
- Cereți copiilor să introducă programele in editorul de cod de la <u>codeguppy.com</u> și apoi să apese butonul de «Run» când au terminat.
- Încurajați copiii să modifice programele modificând coordonatele și culorile existente

Notă: Dacă întâmpinați dificultăți sau aveți nevoie de informații suplimentare, nu ezitați să trimiteți un email pe adresa de contact afișată pe site-ul <u>codeguppy.com</u>

Sfaturi pentru introducerea programelor

Introducerea programelor de pe hârtie în editorul de cod este o modalitate excelentă de a expune copiii la lumea programării. Deoarece tastarea programelor necesită atenție la detalii, copiii vor dezvolta și alte aptitudini folositoare dincolo de programare.

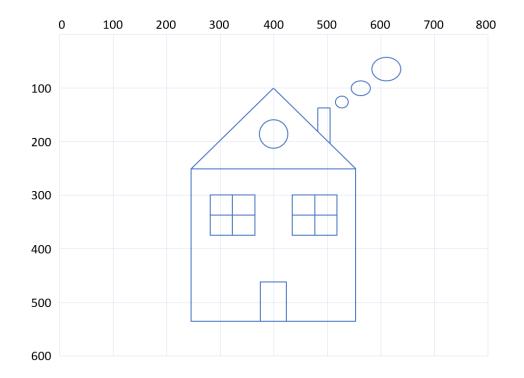
Sfaturi utile:

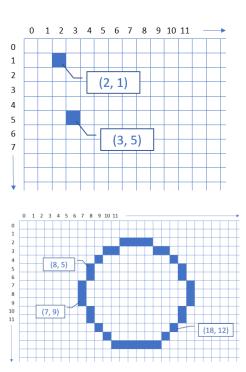
- Cereți copiilor să tasteze programele cu atenție așa cum apar pe hârtie fără să omită nici măcar un număr sau semn de punctuație!
- Programele sunt sensibile la litere mici si mari. Cereți copiilor să tasteze comenzile cu atenție
- Pentru a evita acumularea de erori, copiii pot rula programele din timp in timp folosind butonul "Run" (nu rulați înainte de tastarea completă a liniei curente).
- Dacă un program refuză să ruleze, verificați atent împreună cu copiii codul tastat. Sigur a fost introdusă o eroare undeva!

Să înțelegem programele

Toate programele din această carte au efect grafic. Ele desenează pe o suprafață grafică numită "canvas". Această suprafață este formată din multe puncte mici care se pot color prin cod. Aceste puncte se numesc pixeli.

Puteți compara suprafața grafică cu o hârtie milimetrică. Fiecare celulă reprezentând un mic pixel pe canvas. Suprafața grafică utilizată de programele noastre este de 800 pixeli lungime pe 600 pixeli înălțime.





Comenzi grafice



circle(x, y, raza)

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



ellipse(x, y, lungime, inaltime)

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, lungime, inaltime)

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)

octarea culorii de dese	Setarea	culorii	de c	deser
-------------------------	---------	---------	------	-------

noStroke() stroke(color) strokeWeight(weight)

Setarea culorii de umplere

background(color) fill(color) noFill()

Formatul culorilor

 #RRGGBB (roşu, verde, albastru)

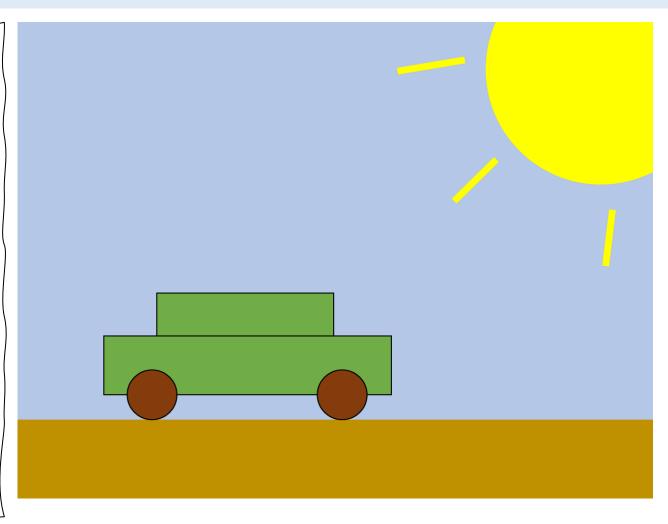
- Culori predefinite

Culori populare

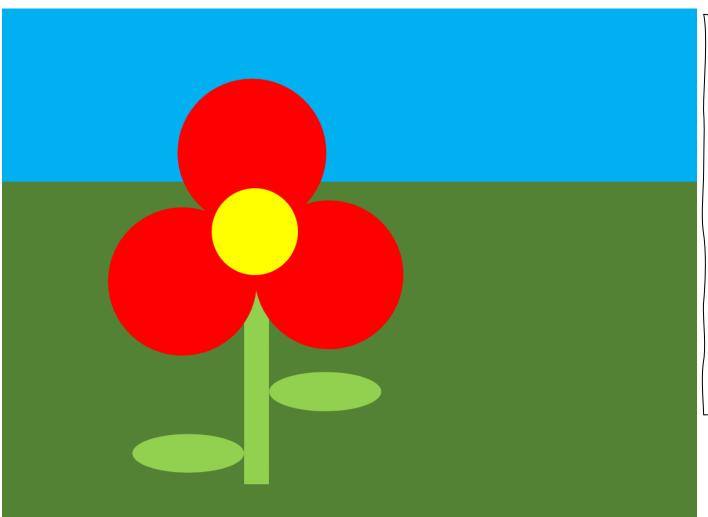
- IndianRed, LightCoral, Salmon, DarkSalmon, LightSalmon, Crimson, Red, FireBrick, DarkRed
- Pink, LightPink, HotPink, DeepPink, MediumVioletRed, PaleVioletRed
- LightSalmon, Coral, Tomato, OrangeRed, DarkOrange, Orange
- Gold, Yellow, LightYellow, LemonChiffon, LightGoldenrodYellow, PapayaWhip, Moccasin, 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, Cad etBlue, 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

Mașină

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

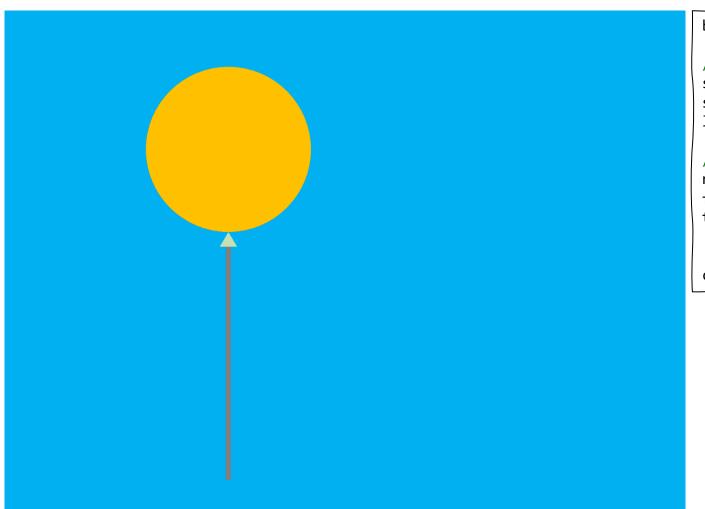


Floare



```
// Fundal
noStroke();
fill(0, 176, 240);
rect(0, 0, 800, 200);
fill(84, 130, 53);
rect(0, 200, 800, 600);
// Tulpina
fill(146, 208, 80);
rect(277, 313, 30, 237);
ellipse(215, 514, 124, 46);
ellipse(374, 438, 134, 46);
// Floare
fill("red");
circle(290, 160, 87);
circle(209, 314, 87);
circle(377, 307, 87);
fill("yellow");
circle(290, 260, 46);
```

Balon



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

Om de zăpadă

```
background("#8faadc");
// Mâna dreaptă
stroke("#843c0c");
strokeWeight(10);
line(604, 359, 495, 291);
line(604, 359, 607, 378);
line(604, 359, 627, 367);
line(604, 359, 627, 355);
// Corpul
stroke("#335693");
strokeWeight(1);
fill("white");
circle(400, 445, 126);
circle(400, 285, 99);
circle(400, 151, 68);
// Ochii
fill("black");
noStroke();
circle(366, 124, 10);
circle(428, 124, 10);
```

```
// Gura
circle(362, 179, 6);
circle(379, 197, 6);
circle(403, 201, 6);
circle(428, 199, 6);
// Nasturi
circle(407, 267, 10);
circle(407, 320, 10);
circle(407, 433, 10);
circle(407, 502, 10);
// Nas și pălărie
fill("#ffc000");
triangle(397, 161, 401, 176, 483, 146);
fill("#c55a11");
triangle(321, 125, 353, 39, 434, 73);
// Mâna stângă
stroke("#843c0c");
strokeWeight(10);
line(225, 168, 323, 265);
line(225, 168, 196, 171);
line(225, 168, 201, 157);
line(225, 168, 216, 135);
```



Casă



```
// Fundal
noStroke();
fill("#00b0f0");
rect(0, 0, 800, 400);
fill("#548235");
rect(0, 400, 800, 600);
fill("#ffc740");
rect(109, 254, 325, 274);
// Fereastra din stânga
stroke("#c55a11");
strokeWeight(3);
fill("#dae3f3");
square(147, 302, 56);
line(175, 302, 175, 358);
line(147, 330, 203, 330);
// Fereastra din dreapta
square(347, 302, 56);
line(375, 302, 375, 358);
line(347, 330, 403, 330);
```

```
// Usa
strokeWeight(1);
fill("#ed7d31");
rect(229, 417, 90, 110);
fill("#bfbfbf");
circle(305, 471, 8);
// Cosul
noStroke();
fill("#843c0c");
rect(174, 117, 24, 80);
// Acoperisul
fill("#ed7d31");
triangle(109, 254, 272, 75, 434, 254);
// Soarele
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);
```

Casă 2



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

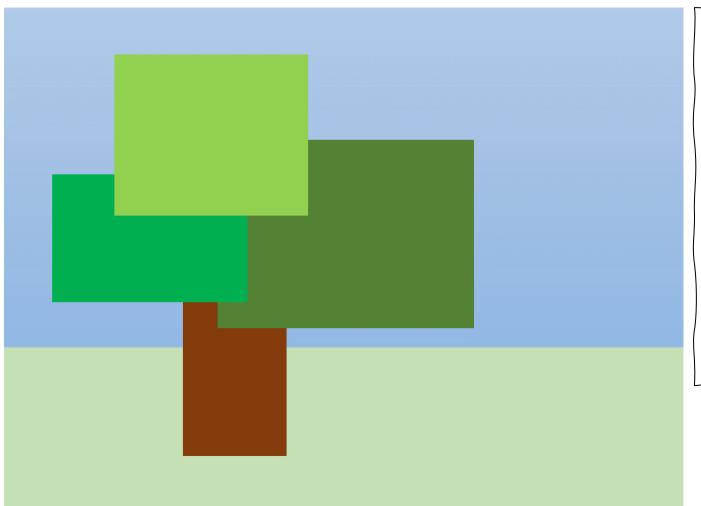
// Pom
fill("#843c0c");
rect(104, 240, 28, 190);
fill("#548235");
ellipse(119, 139, 172, 229);
```

```
// Casa
fill("#ffc000");
rect(272, 260, 380, 227);
// Acoperisul
fill("#843c0c");
triangle(252, 260, 460, 110, 670, 260);
// Fereastra din stânga
stroke("#c55a11");
strokeWeight(3);
fill("#dae3f3");
square(295, 287, 96);
line(343, 287, 343, 383);
line(295, 335, 391, 335);
// Fereastra din dreapta
square(535, 287, 96);
line(583, 287, 583, 383);
line(535, 335, 631, 335);
```

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

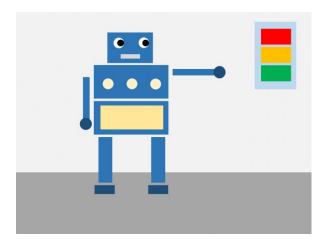
// Soarele
fill("#ffc000");
stroke("#ffc000");
circle(700, 100, 32);
line(631, 100, 658, 100);
line(659, 43, 673, 59);
line(729, 61, 743, 42);
line(750, 106, 770, 106);
line(729, 141, 742, 155);
line(674, 139, 660, 155);
```

Pom pătrat



```
noStroke();
// Fundal
fill("#aac6e7");
rect(0, 0, 800, 400);
fill("#c5e0b4");
rect(0, 400, 800, 600);
// Tulpins
fill("#843c0c");
rect(212, 330, 120, 190);
// Frunzele
fill("#548235");
rect(255, 158, 300, 220);
fill("#00b050");
rect(57, 197, 230, 150);
fill("#92d050");
rect(130, 55, 230, 190);
```

Robot



```
noStroke();

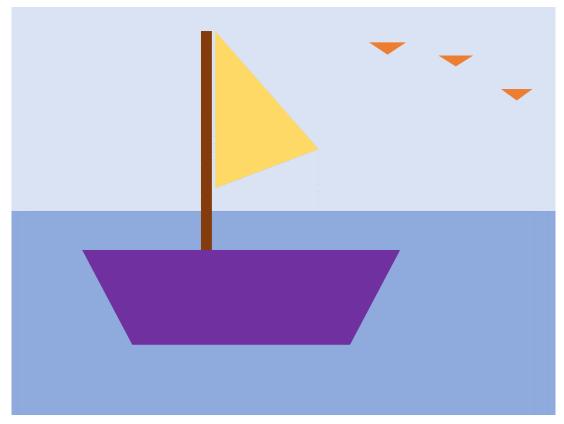
// Fundal
fill("#efefef");
rect(0, 0, 800, 430);
fill("#a7a7a7");
rect(0, 430, 800, 600);

// Cap și corp
fill("#2e75b6");
rect(249, 54, 122, 83);
rect(211, 142, 200, 90);
rect(211, 240, 200, 90);
```

```
// Picioare
rect(224, 338, 36, 124);
rect(368, 338, 36, 124);
// Brate
rect(182, 176, 16, 118);
rect(426, 155, 118, 16);
// Tălpi si mâini
fill("#1f4e79");
rect(214, 468, 55, 25);
rect(359, 468, 55, 25);
circle(190, 300, 15);
circle(553, 162, 15);
// Ochi
fill("white");
circle(278, 83, 14);
circle(347, 83, 14);
fill("black");
circle(283, 83, 9);
circle(352, 83, 9);
```

```
// Gura
fill("#d8d8d8");
rect(285, 113, 53, 13);
// Decoratii
fill("#fff2cc");
circle(250, 195, 12);
circle(315, 195, 12);
circle(380, 195, 12);
fill("#ffe699");
rect(230, 250, 165, 65);
// Lumini
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);
```

Barcă



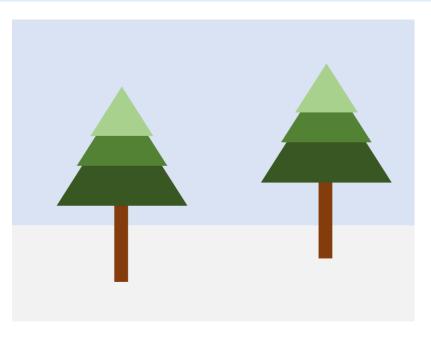
```
noStroke();
// Fundal
fill("#dae3f3");
rect(0, 0, 800, 300);
fill("#8faadc");
rect(0, 300, 800, 600)
// Catarg
fill("#843c0c");
rect(280, 36, 16, 321);
fill("#ffd966");
triangle(300, 36, 450, 207, 300, 264);
// Barca
fill("#7030a0");
rect(178, 357, 319, 140);
triangle(105, 357, 178, 357, 178, 497);
triangle(573, 357, 497, 497, 497, 357);
// Păsări
fill("#ed7d31");
triangle(529, 52, 578, 52, 553, 67);
triangle(631, 71, 677, 71, 654, 85);
triangle(722, 121, 766, 121, 743, 135);
```

Smiley



```
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);
```

Brazi



```
noStroke();
// Fundal
fill("#dae3f3");
rect(0, 0, 800, 400);
fill("#f2f2f2");
rect(0, 400, 800, 200);
// Primul brad
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);
// Al doilea brad
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);
```

Ciupercuță



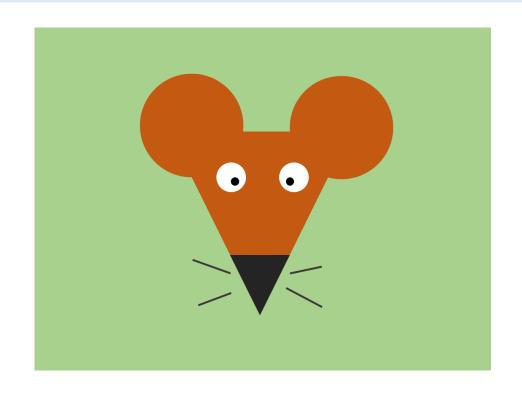
```
noStroke();
// Fundal
fill("#a9d18e");
rect(0, 0, 800, 400);
fill("#843c0c");
rect(0, 400, 800, 200);
// Ciupercuta
fill("#ffc000");
rect(328, 314, 72, 212);
fill("#c00000");
arc(365, 314, 386, 396, 180, 360);
fill("white");
circle(245, 271, 20);
circle(285, 195, 18);
circle(341, 167, 12);
circle(423, 171, 14);
circle(491, 233, 14);
circle(335, 249, 13);
circle(393, 220, 22);
circle(443, 279, 23);
```

Pizza

```
noStroke();
background("#adb9ca");
// Farfuria și pizza
fill("#385723");
circle(400, 300, 260);
fill("white");
circle(400, 300, 254);
fill("#f7c9ab");
circle(400, 300, 225);
// Salam
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);
```

```
// Măsline
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);
// Ananas
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);
```

Şoricel



```
background("#a6cf87");
noStroke();
// Cap și urechi
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);
// Ochi
fill("white");
circle(344, 260, 25);
circle(455, 260, 25);
fill("black");
circle(355, 268, 8);
circle(448, 268, 8);
// Mustăti
stroke("#242424");
strokeWeight(3);
line(282, 403, 345, 427);
line(287, 485, 345, 462);
line(450, 427, 502, 416);
line(442, 455, 504, 486);
```

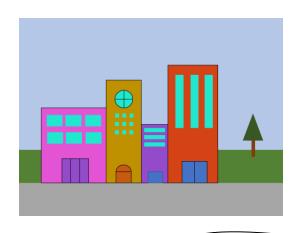
Tren

```
// Fundal
noStroke();
fill("#8faadc");
rect(0, 0, 800, 340);
fill("#a9d18e");
rect(0, 340, 800, 260);
// Partea principală
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);
// Ferestre
fill("#f8cbad");
rect(523, 236, 55, 58);
rect(584, 236, 74, 58);
rect(523, 300, 135, 96);
```

```
// Roti
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);
// Cale ferată și fum
fill("#3b3838");
rect(0, 492, 800, 28);
fill("#f2f2f2");
ellipse(316, 209, 29, 20);
ellipse(377, 166, 46, 32);
ellipse(442, 114, 68, 47);
```

Oraș

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



```
// Clădire 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);
```

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

Pisicuță



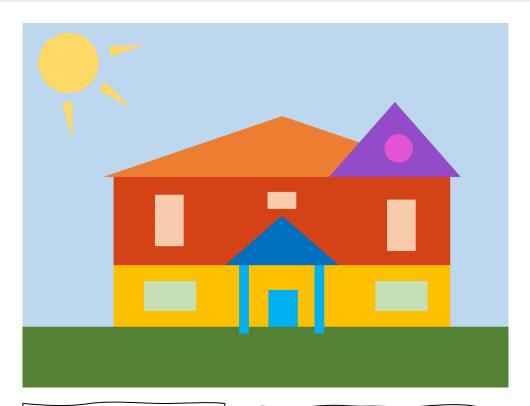
```
// Fundal
noStroke();
fill("#4472c4");
rect(0, 0, 800, 500);
fill("#7030a0");
rect(0, 500, 800, 100);
// Urechi si corp
fill("#f4b183");
triangle(318, 99, 318, 175, 359, 121);
triangle(483, 99, 483, 184, 435, 121);
circle(397, 415, 120);
// Cap și picioare
fill("#f8cbad");
triangle(397, 69, 138, 410, 655, 410);
circle(332, 525, 25);
circle(468, 525, 25);
// Ochi
fill("#44546a");
ellipse(339, 215, 29, 40);
ellipse(461, 215, 29, 40);
// Nas
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);
```

Pasăre

```
background("#a9d18e");
// Picioare
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);
```

```
// Coada și corp
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);
// Cap
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);
```

Casă mare

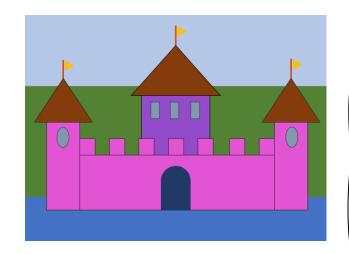


```
// Fundal
noStroke();
background("#bdd7ee");
fill("#548235");
rect(0, 500, 800, 100);
```

```
// Soare
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);
```

```
// Casă
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);
// Prispă
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);
// Ferestre
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);
```

Castel



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

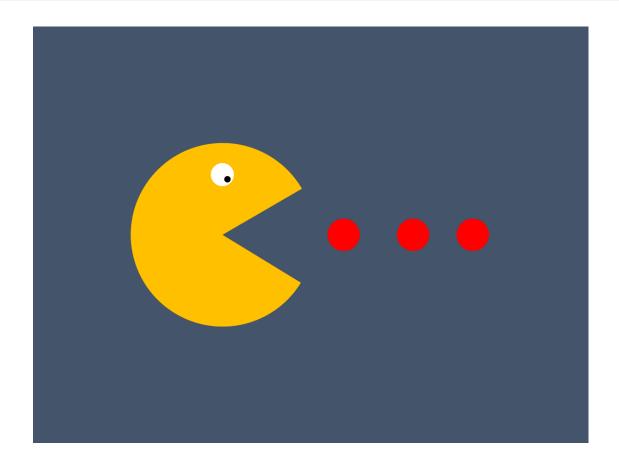
```
// Ferestre
fill("#8497b0");
ellipse(101, 325, 32, 55);
ellipse(709, 325, 32, 55);
rect(335, 230, 22, 43);
rect(386, 230, 22, 43);
rect(440, 230, 22, 43);
// Acoperis
fill("#843c0c");
triangle(25, 284, 101, 167, 179, 284);
triangle(281, 215, 401, 81, 519, 215);
triangle(630, 285, 706, 167, 783, 285);
// Steaguri
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);
// Usa
fill("#203864");
rect(362, 433, 78, 84);
arc(401, 433, 78, 65, 180, 360);
```

Ursuleț



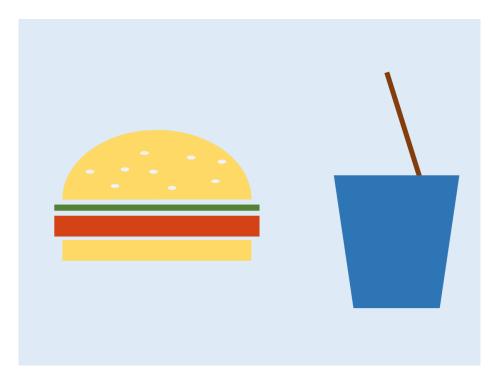
```
background("#b4c7e7");
// Cap și urechi
noStroke();
fill("#843c0c");
circle(281, 137, 56);
circle(527, 137, 56);
fill("#c55a11");
circle(406, 300, 162);
// Ochi
fill("white");
circle(346, 224, 31);
circle(485, 224, 31);
fill("black");
circle(358, 240, 11);
circle(473, 240, 11);
// Nas și gură
fill("#843c0c");
circle(406, 395, 68);
fill("#bcb9b6");
rect(406, 369, 3, 94);
fill("black");
circle(406, 349, 22);
// Papion
fill("#548235");
triangle(257, 509, 257, 420, 403, 465);
triangle(561, 508, 561, 422, 413, 465);
fill("#21e7cf");
circle(407, 465, 8);
```

Pac Man



```
background("#44546a");
noStroke();
// Pacman
fill("#ffc000");
arc(270, 300, 264, 264, 30, 330);
// Ochi
fill("white");
circle(272, 213, 16);
fill("black");
circle(280, 219, 5);
// Mâncare
fill("red");
circle(448, 300, 24);
circle(548, 300, 24);
circle(648, 300, 24);
```

Fast Food



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

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

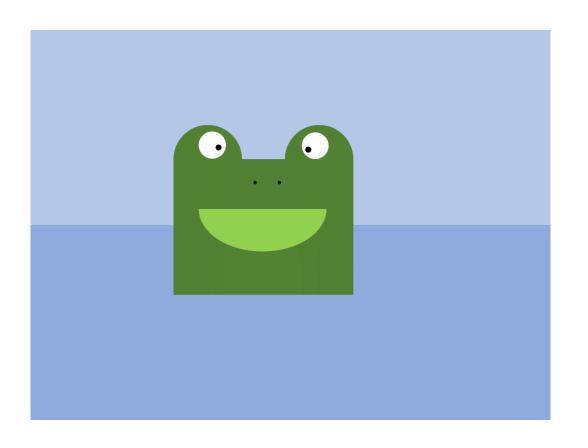
```
// Salata și carnea
fill("#548235");
rect(63, 320, 355, 9);
fill("#d44316");
rect(63, 340, 355, 35);
```

```
// Semintele
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);
// Băutura
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);
```

Cățel

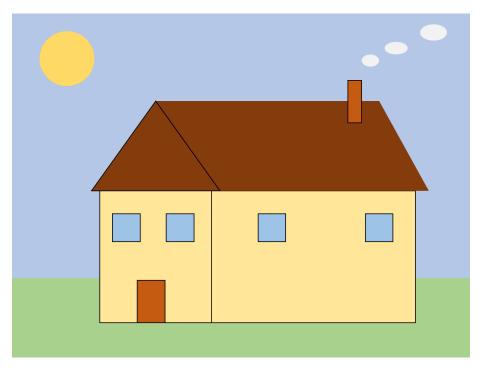
```
background("#00b0f0");
// Cap, corp și urechi
fill("#f8cbad");
rect(315, 95, 200, 380);
triangle(279, 95, 315, 95, 279, 240);
triangle(515, 95, 551, 95, 551, 240);
// Picioarele din spate
rect(257, 315, 58, 160);
line(274, 454, 274, 475);
line(293, 454, 293, 475);
                                                                                      // Gura, nasul, ochii
rect(515, 315, 58, 160);
                                                                                      strokeWeight(3);
line(538, 454, 538, 475);
                                                                                      line(347, 226, 356, 235);
line(557, 454, 557, 475);
                                                                                      line(356, 235, 487, 235);
                                                                                      line(487, 235, 498, 224);
// Picioarele din fată
                                                                                      line(423, 235, 417, 211);
rect(375, 445, 52, 55);
                                                                                      noStroke();
line(393, 481, 393, 499);
                                                                                      fill("#843c0c");
line(412, 481, 412, 499);
                                                                                      rect(364, 185, 106, 27);
rect(375 + 52, 445, 52, 55);
                                                                                      fill("black");
line(393 + 52, 481, 393 + 52, 499);
                                                                                      circle(382, 152, 11);
line(412 + 52, 481, 412 + 52, 499);
                                                                                      circle(454, 152, 11);
```

Broscuță



```
// Fundal
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 300);
fill("#8faadc");
rect(0, 300, 800, 600);
// Corpul și ochii
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);
// Nasul și gura
circle(345, 233, 3);
circle(382, 233, 3);
fill("#92d050");
arc(358, 274, 197, 134, 0, 180);
```

Casă 3



```
// Fundalul şi soarele
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 460);
fill("#a9d18e");
rect(0, 460, 800, 140);
fill("#ffd966");
circle(98, 82, 48);
```

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

```
// Uṣa ṣi ferestrele
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);
// Acoperișul
fill("#843c0c");
noStroke();
rect(251, 152, 389, 157);
triangle(640, 152, 640, 309, 728, 309);
stroke("black");
triangle(251, 152, 139, 309, 363, 309);
// Coșul și fumul
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);
```

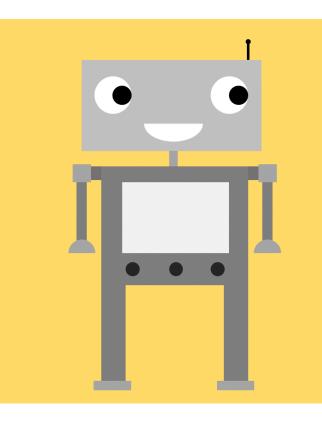
Buburuză

```
background("#f8cbad");
// Picioarele
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);
// Capul
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);
```

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

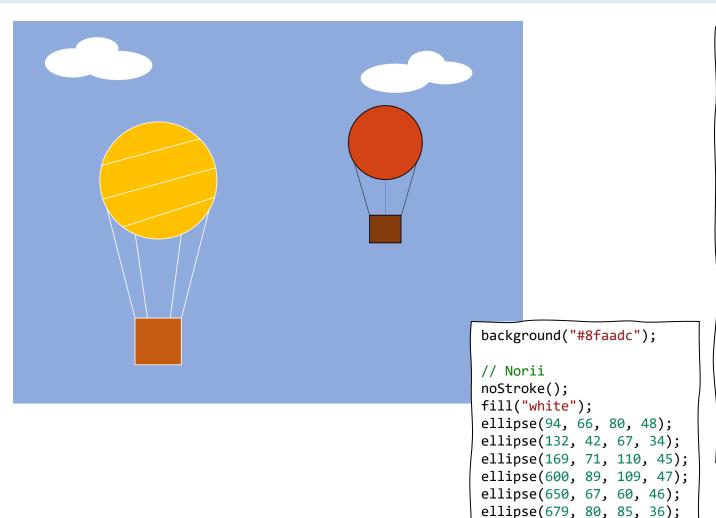
Robot 2

```
background("#ffd966");
noStroke();
// Capul
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);
// Corpul
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);
```



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

Baloane cu aer cald



```
// Balonul galben
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);
// Balonul rosu
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);
```

Camioane

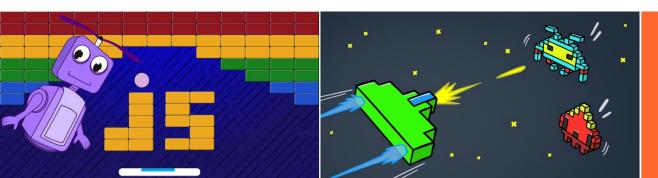
```
// Fundal
noStroke();
fill("#b4c7e7");
rect(0, 0, 800, 267);
fill("#843c0c");
rect(0, 267, 800, 34);
fill("#7f7f7f");
rect(0, 301, 800, 299);
fill("#f1f1f1");
ellipse(33, 545, 18, 7);
ellipse(249, 367, 18, 7);
ellipse(320, 563, 18, 7);
ellipse(565, 352, 18, 7);
ellipse(551, 501, 18, 7);
ellipse(693,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

```
// Camionul macara
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);
// Pachetele
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);
```

Aceste progrămele JavaScript au fost oferite gratuit de codeguppy.com – platforma de programare pentru tineret!

Vizitați https://codeguppy.com pentru mai multe proiecte interesante!

Pentru noutăți urmăriți @codeguppy pe Twitter!





Aceste programe au fost inspirate de:

Kano computer kit examples

Khan academy

https://www.youtube.com/watch?v=mrG33P1lwdl

https://www.youtube.com/watch?v=-96ajr1P8BM

http://howtodrawdat.com/how-to-draw-a-simple-cat-with-simple-shapes-tutorial-for-children-and-preschoolers/

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

https://www.amazon.com/Lets-Draw-House-Shapes/dp/1404227954

http://kiddopedia.net/how-to-draw-a-castle-step-by-step-for-kids/

https://www.how-to-draw-funny-cartoons.com/cartoon-dog.html

https://www.youtube.com/watch?v=YZG704D-600

https://www.pinterest.com/pin/311874342921041781/

https://www.easypeasyandfun.com/how-to-draw-a-ladybug/

https://paintingvalley.com/easy-ladybug-drawing

https://design.tutsplus.com/tutorials/how-to-create-a-cute-robot-game-sprite-using-ssr-in-adobe-illustrator--vector-8442

https://www.youtube.com/watch?v=QWoL3WBZT7g