

1

When Space bar is pressed balloon gets bigger when not pressed it shrinks

```

1 var balloon = createSprite(200, 200);
2 balloon.setAnimation(▼"balloon");
3 balloon.scale = 0.6;
4
5 function draw() {
6   // Draw Background
7   background(▼"white");
8
9   // update balloon size based on user input
10  if (keyDown(▼"space")) {
11    balloon.scale = balloon.scale + 0.02;
12  } else {
13    balloon.scale = balloon.scale - 0.01;
14  }
15
16  // Draw Animations
17  drawSprites();
18 }

```

2

Video – Do watch really helps

3

```

1 var blueGear = createSprite(100, 220);
2 blueGear.setAnimation(▼"blue_gear");
3
4 var greenGear = createSprite(183, 298);
5 greenGear.setAnimation(▼"green_gear");
6
7 var redGear = createSprite(185, 145);
8 redGear.setAnimation(▼"red_gear");
9
10 function draw() {
11   background(▼"white");
12
13   if (keyDown(▼"space")) {
14     blueGear.rotation = blueGear.rotation - 1;
15     greenGear.rotation = greenGear.rotation + 1;
16     redGear.rotation = redGear.rotation + 1;
17   } else {
18     blueGear.rotation = blueGear.rotation + 1;
19     greenGear.rotation = greenGear.rotation - 1;
20     redGear.rotation = redGear.rotation - 1;
21   }
22
23   drawSprites();
24 }
25

```

4

```

1 var blueGear = createSprite(100, 220);
2 blueGear.setAnimation(▼"blue_gear");
3
4 var greenGear = createSprite(183, 298);
5 greenGear.setAnimation(▼"green_gear");
6
7 var redGear = createSprite(185, 145);
8 redGear.setAnimation(▼"red_gear");
9
10 function draw() {
11   background(▼"white");
12
13   if (mouseDown()) {
14     blueGear.rotation = blueGear.rotation - 1;
15     greenGear.rotation = greenGear.rotation + 1;
16     redGear.rotation = redGear.rotation + 1;
17   } else {
18     blueGear.rotation = blueGear.rotation + 1;
19     greenGear.rotation = greenGear.rotation - 1;
20     redGear.rotation = redGear.rotation - 1;
21   }
22
23   drawSprites();
24 }
25

```

5

```

1 var balloon = createSprite(200, 50);
2 balloon.setAnimation(▼"balloon");
3 balloon.scale = 0.1;
4
5 function draw() {
6   background(▼"white");
7
8   // If the mouse is down, move the balloon
9   if (mouseDown("leftButton")) {
10    balloon.y = balloon.y - 1;
11  } else {
12    balloon.y = balloon.y + 1;
13  }
14
15  drawSprites();
16 }
17

```

6

```

1 var blender = createSprite(100, 300);
2 blender.setAnimation(▼"blender");
3 var mixer = createSprite(300, 300);
4 mixer.setAnimation(▼"mixer");
5
6 function draw() {
7   background(▼"lightyellow");
8   fill(▼"burlywood");
9   rect(0, 350, 400, 50);
10
11  if (World.mouseX < 200) {
12    blender.x = randomNumber(95, 105);
13    blender.y = randomNumber(295, 305);
14  } else {
15    mixer.x = randomNumber(295, 305);
16    mixer.y = randomNumber(295, 305);
17  }
18  drawSprites();
19 }

```

7a

```

1 var outside = createSprite(200, 200);
2 outside.setAnimation(▼ "pine_trees");
3 var bug = createSprite(350, 350);
4 bug.setAnimation(▼ "ladybug");
5
6 function draw() {
7   if (World.mouseY > 300) {
8     bug.x = bug.x - 2;
9   }
10  drawSprites();
11 }
12
13

```

7 b

```

1 var outside = createSprite(200, 200);
2 outside.setAnimation(▼ "meadow");
3
4 var ghost = createSprite(200, 300);
5 ghost.setAnimation(▼ "ghost");
6
7 function draw() {
8   // Wrap the movement lines in two conditions
9   if (World.mouseX < ghost.x) {
10    ghost.x = ghost.x - 5;
11  }
12  if (World.mouseX > ghost.x) {
13    ghost.x = ghost.x + 5;
14  }
15  drawSprites();
16 }
17

```

8

```

1 var backdrop = createSprite(200, 200);
2 backdrop.setAnimation(▼ "sky");
3 var creature = createSprite(200, 250);
4 creature.setAnimation(▼ "creature");
5 creature.scale = 0.2;
6 function draw() {
7   // shake the sprite when the mouse is pressed
8   drawSprites();
9   if (mouseDown("leftButton")) {
10    creature.rotation = randomNumber(-5, 5);
11  } else {
12    // display the text when the mouse is NOT pressed
13    fill(▼ "black");
14    textSize(40);
15    text("Press the mouse to shake the creature.", 20, 50, 360, 100);
16  }
17 }
18
19

```

9a

```

1 var spiral = createSprite(100, 200);
2 spiral.setAnimation(▼ "lollipop");
3 var spiral2 = createSprite(300, 200);
4 spiral2.setAnimation(▼ "lollipop2");
5 function draw() {
6   background(▼ "pink");
7   if (mouseDown("leftButton")) {
8     spiral2.scale = spiral2.scale / 1.01;
9     spiral2.rotation = spiral2.rotation + 3;
10    spiral.scale = spiral.scale * 1.01;
11    spiral.rotation = spiral.rotation - 3;
12  } else {
13    spiral.scale = spiral.scale / 1.01;
14    spiral.rotation = spiral.rotation + 3;
15    spiral2.scale = spiral2.scale * 1.01;
16    spiral2.rotation = spiral2.rotation - 3;
17  }
18  drawSprites();
19 }
20

```

9 b

```

1 var bee = createSprite(200, 200);
2 bee.setAnimation(▼ "bee");
3 function draw() {
4   background(▼ "lightblue");
5   bee.x = World.mouseX;
6   bee.y = World.mouseY;
7   drawSprites();
8 }
9

```

9 c

```

1 var bee = createSprite(200, 200);
2 bee.setAnimation(▼ "bee");
3 function draw() {
4   background(▼ "lightblue");
5   bee.x = World.mouseX + randomNumber(-50, 50);
6   bee.y = World.mouseY + randomNumber(-50, 50);
7   drawSprites();
8 }
9

```

9
d

```
1 var salt = createSprite (200, 200) ;  
2 salt.setAnimation(▼ "salt");  
3 salt.rotation = 150;  
4  
5 function draw() {  
6   background(▼ "skyblue");  
7   if (mouseDidMove()) {  
8     salt.rotation = randomNumber(150, 170);  
9   }  
10  
11   // If mouseDidMove, rotate the salt shaker ra  
12  
13   drawSprites();  
14 }  
15
```