Project 66

66

DP EDUCATION

Coding School

0
Images count8

Aa Bb Cc Dd

How It Works — Start here

Run — See the App

Built on Code Studio ▲

❖ Let's design an app by choosing images that match English letters.

❖ English characters and their matching images are provided in the images library that you need to design. Let's see how to design using them as follows.

❖ Let's use the code blocks used in creating a sprite to add the image of a wooden background for the background.

```
var woodbackground = createSprite(200, 200) ▬ ;
woodbackground.setAnimation(▼ "woodbackground");
woodbackground.scale = 1.3;
```

Create the sprite as Woodbackground and give its x and y positions as 200 and 200.
Use the "setAnimation" block to set the animation for the sprite. For that, select the "Woodbackground" image of the wooden background.
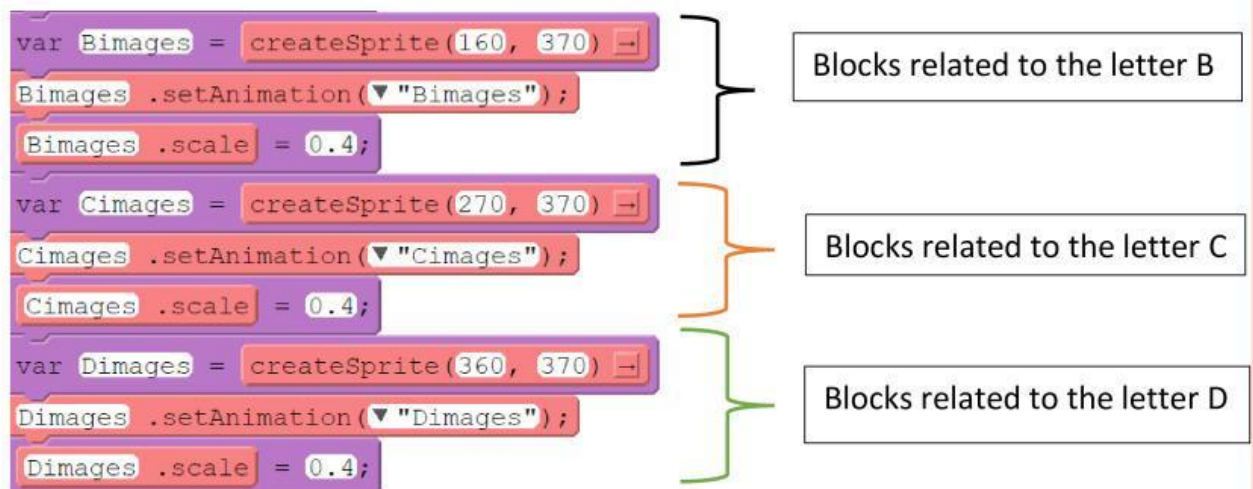
Give the scale of the sprite as 1.3.

❖ After designing the wooden background, let's design English characters and related images on that background.

❖ Arrange the blocks as follows to add the image of the letter A.

```
var Aimages = createSprite(55, 370) ▬
Aimages .setAnimation(▼ "Aimages");
Aimages .scale = 0.4;
```

Create the sprite as Aimages and give its x and y positions as 55 and 370. Use the "setAnimation"

block to set the animation for the sprite. Use the "setAnimation" block to set the animation for the sprite

❖ As above, apply blocks for letters B, C, D as follows.

```
var Bimages = createSprite(160, 370) →
Bimages .setAnimation(▼ "Bimages");
Bimages .scale = 0.4;
```
Blocks related to the letter B

```
var Cimages = createSprite(270, 370) →
Cimages .setAnimation(▼ "Cimages");
Cimages .scale = 0.4;
```
Blocks related to the letter C

```
var Dimages = createSprite(360, 370) →
Dimages .setAnimation(▼ "Dimages");
Dimages .scale = 0.4;
```
Blocks related to the letter D

❖ Use blocks as follows to add an image of an apple.

```
var Apple = createSprite(360, 230) → ;
Apple .setAnimation(▼ "Apple");
Apple .scale = 0.25;
```

Create the sprite as Apple and give its x and y positions as 360 and 230. Use the "setAnimation" block to set the animation for the sprite. For that, select the image of "Apple" and give the scale of the sprite as 0.25.

❖ Just like adding the apple, add the image of the ant as shown below.

```
var Ant = createSprite(40, 110) → ;
Ant .setAnimation(▼ "Ant");
Ant .scale = 0.2;
```

❖ Arrange the other 5 images in the same way as above in the following blocks.

```
var Ball = createSprite(50, 250) ➡ ;
Ball .setAnimation(▼"ball2.png_1");
Ball .scale = 0.4;
var Car = createSprite(190, 250) ➡ ;
Car.setAnimation(▼"car2.png_1");
Car .scale = 0.3;
var Doll = createSprite(200, 100) ➡ ;
Doll .setAnimation(▼"doll2.png_1");
Doll .scale = 0.4;
var Book = createSprite(80, 160) ➡ ;
Book .setAnimation(▼"book new.png_1");
Book .scale = 0.4;
var cap = createSprite(250, 180) ➡ ;
Cap .setAnimation(▼"Cap");
cap .scale = 0.4;
var Dog = createSprite(350, 120) ➡ ;
Dog .setAnimation(▼"dog.png_1");
Dog .scale = 0.3;
```

❖ Then set the "drawSprites" block inside the "function draw" block as follows.

```
function draw() { ➡
    drawSprites();
```
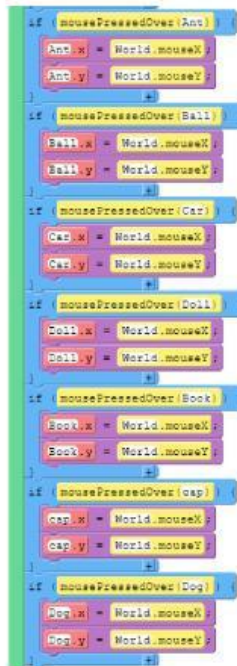
❖ When the mouse is pressed on the sprite named "Apple", apply blocks as follows to move the sprite named "Apple" in the direction of the "X" axis and in the direction of the "Y" axis of the screen. Connect that block set to the "drawSprites" block itself.

```
if ( mousePressedOver(Apple) ) {
    Apple.x = World.mouseX;
    Apple.y = World.mouseY;
}
```
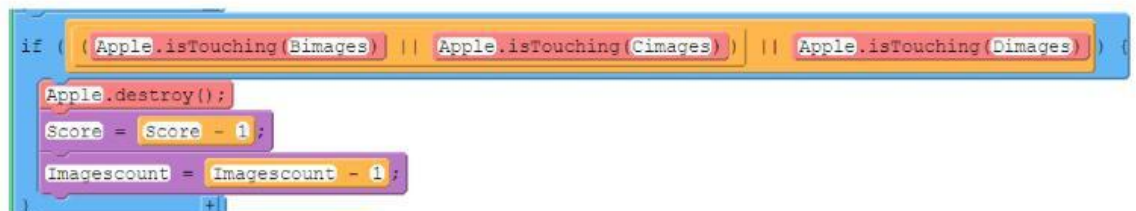
❖ As above, when the mouse is pressed on the sprites "Ant", "Ball", "Car", "Doll", "Book", "Cap" and "Dog", the respective sprite will move in the direction of "X" axis and "Y" on the screen. Apply blocks as follows to move in axis direction. Connect that set of blocks to the block above.

```
if ( mousePressedOver(Ant) ) {
    Ant.x = World.mouseX ;
    Ant.y = World.mouseY ;
}
if ( mousePressedOver(Ball) ) {
    Ball.x = World.mouseX ;
    Ball.y = World.mouseY ;
}
if ( mousePressedOver(Car) ) {
    Car.x = World.mouseX ;
    Car.y = World.mouseY ;
}
if ( mousePressedOver(Doll) ) {
    Doll.x = World.mouseX ;
    Doll.y = World.mouseY ;
}
if ( mousePressedOver(Book) ) {
    Book.x = World.mouseX ;
    Book.y = World.mouseY ;
}
if ( mousePressedOver(cap) ) {
    cap.x = World.mouseX ;
    cap.y = World.mouseY ;
}
if ( mousePressedOver(Dog) ) {
    Dog.x = World.mouseX ;
    Dog.y = World.mouseY ;
}
```

❖ When the sprite named "Apple" touches the sprite named "Aimages", the sprite named "Apple" disappears and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( Apple.isTouching(Aimages) ) {
    Apple.destroy();
    Score = Score + 1 ;
    Imagescount = Imagescount - 1 ;
}
```

❖ When the sprite named "Apple" touches the sprite named "Bimages" or the sprite named "Cimages" or the sprite named "Dimages", the sprite named "Apple" will disappear and the value of Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( (Apple.isTouching(Bimages)) || Apple.isTouching(Cimages) || Apple.isTouching(Dimages) ) {
    Apple.destroy();
    Score = Score - 1 ;
    Imagescount = Imagescount - 1 ;
}
```

❖ When the sprite named "Ant" touches the sprite named "Aimages", the sprite named "Ant" disappears and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( (Ant.isTouching(Aimages)) ) {
    Ant.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
```

❖ When the sprite named "Ant" touches the sprite named "Bimages" or the sprite named "Cimages" or the sprite named "Dimages", the sprite named "Ant" will disappear and the value of Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( (Ant.isTouching(Bimages)) || Ant.isTouching(Cimages) ) || Ant.isTouching(Dimages) ) {
    Ant.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
```

❖ When the sprite named "Ball" touches the sprite named "Bimages", the sprite named "Ball" disappears and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( Ball.isTouching(Bimages) ) ) {
    Ball.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
```

❖ When the sprite named "Ball" touches the sprite named "Aimages" or the sprite named "Cimages" or the sprite named "Dimages", the sprite named "Ball" will disappear and the value of the Score will decrease by one and the value of Imagescount will decrease by one. should be less.

```
if ( (Ball.isTouching(Aimages)) || Ball.isTouching(Cimages) ) || Ball.isTouching(Dimages) ) {
    Ball.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
```

❖ When the sprite named "Book" touches the sprite named "Bimages", the sprite named "Book" will disappear and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( Book.isTouching(Bimages) ) {
    Book.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Book" touches the sprite named "Aimages" or the sprite named "Cimages" or the sprite named "Dimages", the sprite named "Book" will disappear and the value of Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( ( Book.isTouching(Aimages) || Book.isTouching(Cimages) ) || Book.isTouching(Dimages) ) {
    Book.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Car" touches the sprite named "Cimages", the sprite named "Car" disappears and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( Car.isTouching(Cimages) ) {
    Car.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Car" touches the sprite named "Aimages" or the sprite named "Bimages" or the sprite named "Dimages", the sprite named "Car" will disappear and the value of Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( ( Car.isTouching(Aimages) || Car.isTouching(Bimages) ) || Car.isTouching(Dimages) ) {
    Car.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Cap" touches the sprite named "Cimages", the sprite named "Cap" disappears and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( Cap.isTouching(Cimages) ) {
    Cap.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Cap" touches the sprite named "Aimages" or the sprite named "Bimages" or the sprite named "Dimages", the sprite named "Cap" disappears and the value of the Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( (Cap.isTouching(Aimages) || Cap.isTouching(Bimages)) || Cap.isTouching(Dimages) ) {
    Cap.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Doll" touches the sprite named "Dimages", the sprite named "Doll" will disappear and the value of Score should be increased by one and the value of Imagescount should be reduced by one.

```
if ( Doll.isTouching(Dimages) ) {
    Doll.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Doll" touches the sprite named "Aimages" or the sprite named "Bimages" or the sprite named "Cimages", the sprite named "Doll" will disappear and the value of Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( (Doll.isTouching(Aimages) || Doll.isTouching(Bimages) ) || Doll.isTouching(Cimages) ) {
    Doll.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Dog" touches the sprite named "Dimages", the sprite named "Dog" will disappear and the value of Score should be increased by one and the value of Imagescount should be reduced by one..

```
if ( Dog.isTouching(Dimages) ) {
    Dog.destroy();
    Score = Score + 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ When the sprite named "Dog" touches the sprite named "Aimages" or the sprite named "Bimages" or the sprite named "Cimages", the sprite named "Dog" disappears and the value of the Score should be reduced by one and the value of Imagescount should be reduced by one. should be less.

```
if ( (Dog.isTouching(Aimages) || Dog.isTouching(Bimages) ) || Dog.isTouching(Cimages) ) {
    Dog.destroy();
    Score = Score - 1;
    Imagescount = Imagescount - 1;
}
    +
```

❖ Use blocks as follows to record as Score in white characters, to record as Images count and to display the value of Imagescount. Adjust the size of those characters to 30. Also, when the value of Imagescount is 0 and the value of Score is 8, "You are very Apply blocks as follows to record as "talented" and to record as "Try again" when the value of Imagescount is 0 and the value of Score is less than 7.

```
fill( ▼ "white");
textSize(30);
text("Score" + Score, 20, 20); →
text("Images count" + Imagescount, 20, 50); →
if ( Imagescount == 0 && Score == 8 ) {
    text("You are very talented", 20, 200); →
}                    +
if ( Imagescount == 0 && Score < 7 ) {
    text("Try aganin", 20, 200); →
}                    +
```

Select The Correct answer.

1. `Dog .scale = 0.3;` What does this mean?

   The sprite named "Dog" has a length of 0.3px.
   The sprite named "Dog" has a scale of 0.3.
   The sprite named "Dog" has a width of 0.3px.

2. In the sprite called "Book", what blocks are needed to place the value of X at 23 and the value of Y at 50?

   ```
   var Book = createSprite(50, 23) → ;
   ```

   ```
   var Book = createSprite(23, 50) → ;
   ```

   ```
   var Book = createSprite(23, 23) → ;
   ```