



Maze Game

Use the blocks below to create your own Scratch code. Look at where you can edit parts of the code to change how it works.

1. What should happen when the game is first launched?

```
when green flag clicked
point in direction 90
go to x: -220 y: 0
```

- Send the sprite to a particular place on the screen and tell it to point in the direction of the exit.
- You can try editing the variables to change where the sprite goes to or which direction it points.

2. How is the character controlled?

- When the arrow keys are pressed, the sprite needs to turn and move in the right direction.
- Try changing the number of steps to make the character move faster or slower.


```
when up arrow key pressed
point in direction 0
move 10 steps
```

```
when down arrow key pressed
point in direction 180
move 10 steps
```

```
when right arrow key pressed
point in direction 90
move 10 steps
```


```
when left arrow key pressed
point in direction -90
move 10 steps
```

3. What happens when an obstacle is touched?

- Firstly, you need to add the block for 'when  is clicked' again.
- The code needs to know that if the obstacles are touched, the sprite must 'bounce back' 10 steps, like bumping into a wall.
- To get the right colour, click in the 'touching colour ?' block then click on one of the obstacles in your maze to pick up the exact colour.

```
when green flag clicked
forever
if touching colour red ? then
  move -10 steps
```

4. What happens when the green exit is reached?

- Again, add a new block for 'when  is clicked'. This time, the code should check if the sprite is touching the green exit and if so, display the message.
- You can decide what the message will say to congratulate the player!

```
when green flag clicked
forever
if touching colour green ? then
  say Well Done! You did it!
```

Challenge:

- How can you improve your game?
- Can you add other effects to make it more exciting?
- Can you make the sprite move faster or slower?



Maze Game

Use the instructions below, along with your written algorithm ideas, to help you program the code for the game.

1. What should happen when the game is first launched?

When  is clicked, the sprite should Go To a particular place (x,y) and Point in Direction of the exit.

2. How is the character controlled?

When Up Arrow key pressed, Point in Direction 0.
Add similar instructions for right, left and down arrows.

3. What happens when an obstacle is touched?

When  is clicked. Forever check if the sprite is touching the colour of the obstacle, then move -10 steps.

4. What happens when the green exit is reached?

When  is clicked. Forever check if the sprite is touching the colour of the green exit, then say Well Done!

Challenge:

- How can you improve your game?
- Can you add other effects to make it more exciting?
- Can you make the sprite move faster or slower?



Maze Game

Use your written algorithm to program the code for the game, considering each of these questions for each part of the code you will require.

- What should happen when the game is first launched?
- How is the character is controlled? How does it respond to keys being pressed on the keyboard?
- What happens when an obstacle is touched?
- What happens when the green exit is reached?

Challenge:

- How can you improve your game?
- Can you add other effects to make it more exciting?
- Can you make the sprite move faster or slower?