

# Lesson 10:

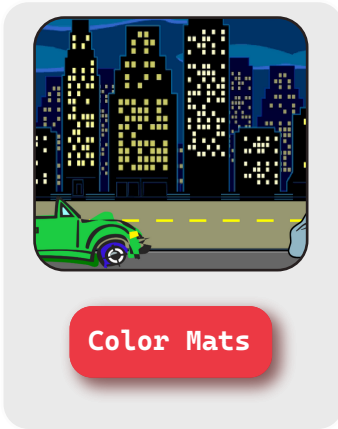
# Sensing Things III



Games are even more fun if they have scores and levels. In this lesson, we'll learn to create advanced games.

# Let's start with debugging!

As usual, let's debug some simple games first!



## Getting ready for the lesson

### login to your Scratch Account

- 1 Sign into your Scratch account.

Join Scratch

Sign in

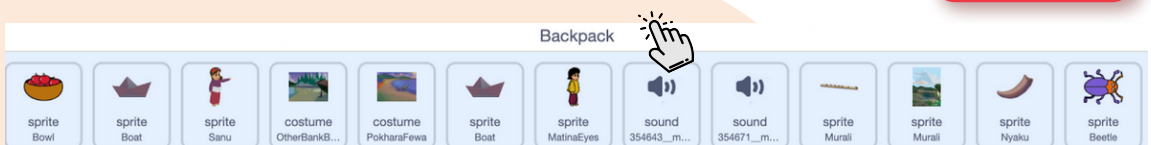
- 2 Set to high contrast mode

Original

High Contrast

- 3 Use the backpack to get objects from other projects

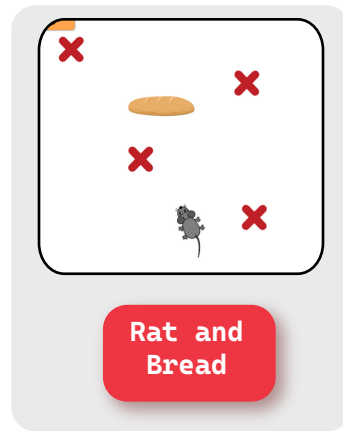
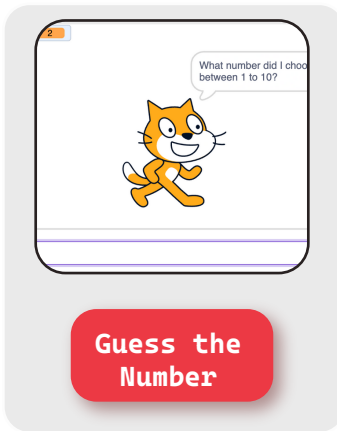
noCODES



# Let's explore some examples



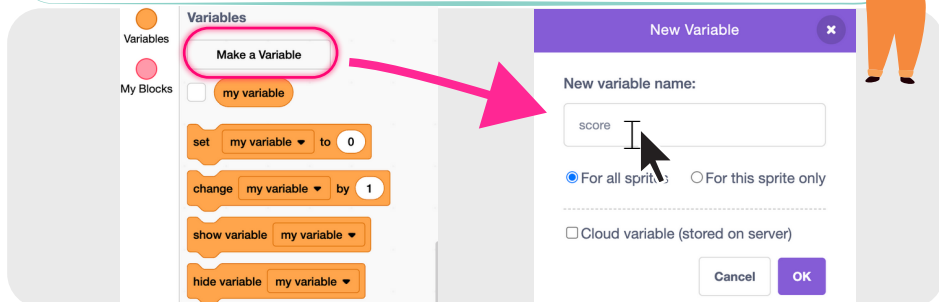
Play with these projects and see how they are made.




# Let's create a game with score


Let's create a game with scores, levels etc. To help the computer count and remember these things, we make variables.

**Think of variables as objects that can store numbers, words, letters, etc.**



○ Use any of the prompts below to get ideas for your game

 What happens on a rainy day

 A game about flying (animals, birds or objects)

 A game that takes place on a farm

You can also work  
on a different idea!



○ Try these blocks in your projects

### Decrease the variable

```

forever
  if touching color [green] ? then
    change score by -1
  
```

### Increase the variable

```

forever
  if touching [Sprite name] ? then
    change Score by 1
  
```

### Ask and compare answers

```

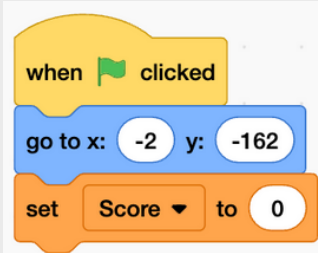
ask How old are you? and wait
if answer > 18 then
  say You're an adult! for 2 seconds
  
```

### If and else

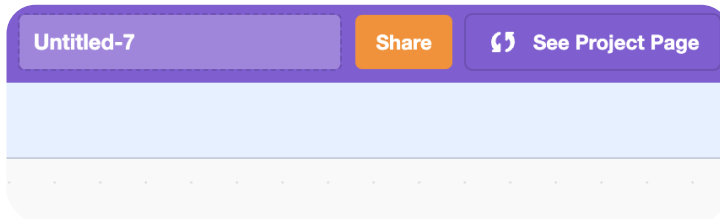
```

forever
  if distance to [Sprite name] < 50 then
    glide 1 secs to random position
  else
    switch costume to sit down
  
```

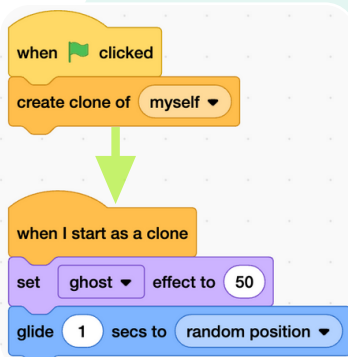
### Reset the game and score



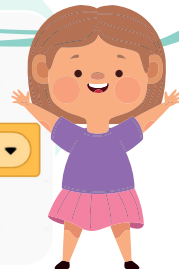
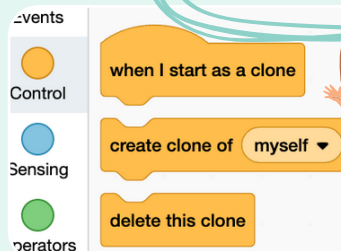
Share your project. Explore the projects shared by your friends and leave comments!



## More things to explore



Do you need many copies of the same sprite?  
Clone it!



Explore this simple project to see more ways to use clones



## Let's reflect

- 🕒 How did the use of variables make your games different from the ones you created in the previous lesson?
- 🕒 Think about your projects from the previous lessons. In which of them would you love to use variables? Why?