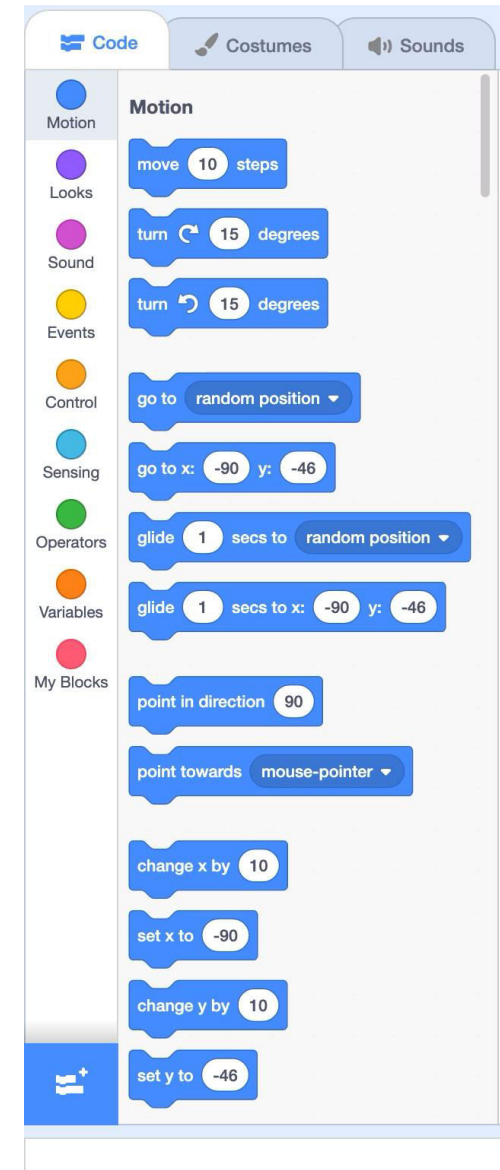


# All About Scratch

By Rishivandhan Musuvathi

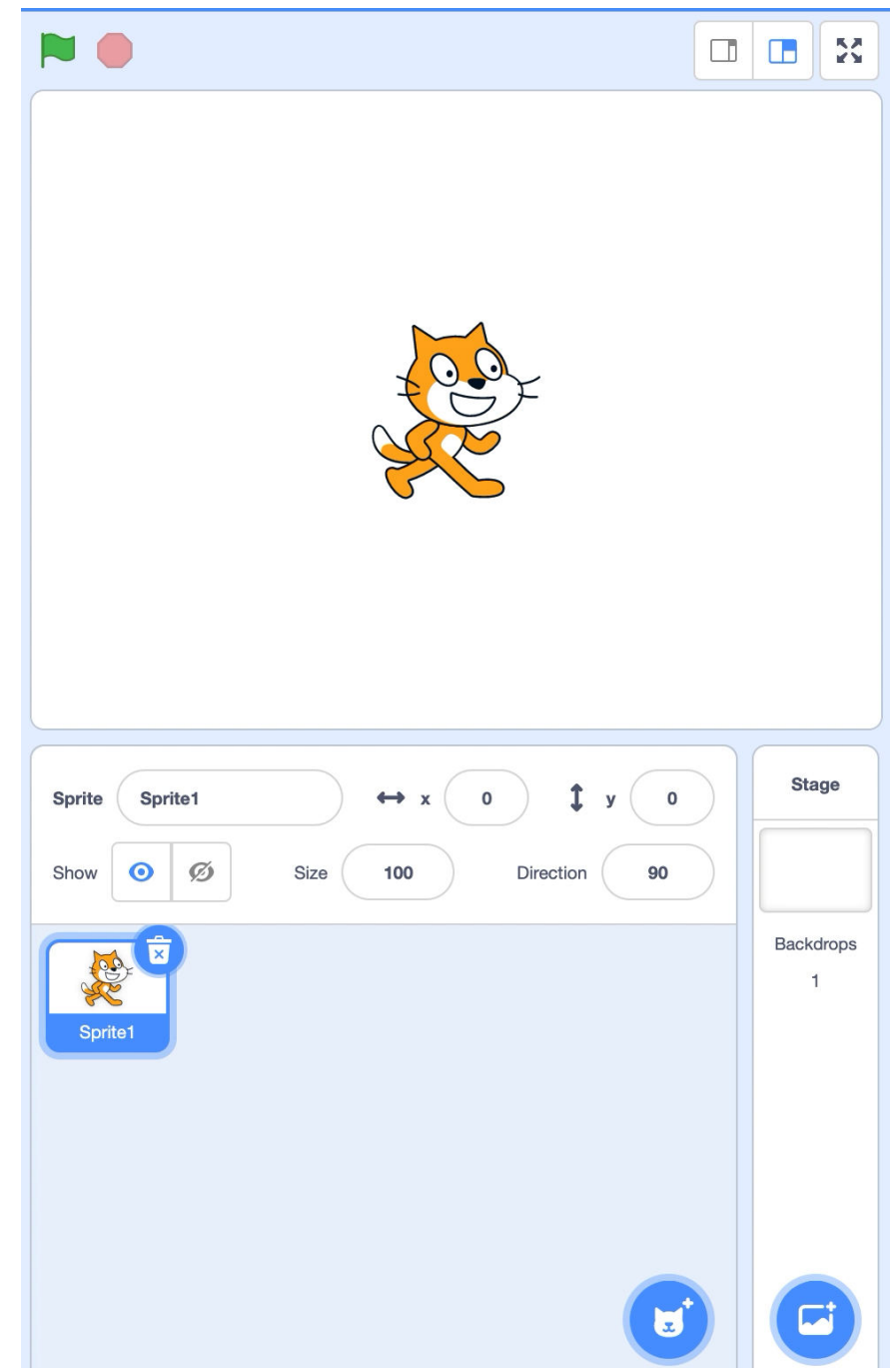
# What is Block Coding

- Block coding is the first step into learning programming games and more
- They are generally used to create games and apps.
- There are multiple platforms where you can do block coding.
- The picture on the right shows couple of blocks used in scratch.
- These blocks are used to make any games you wish to make using scratch.



# The Stage

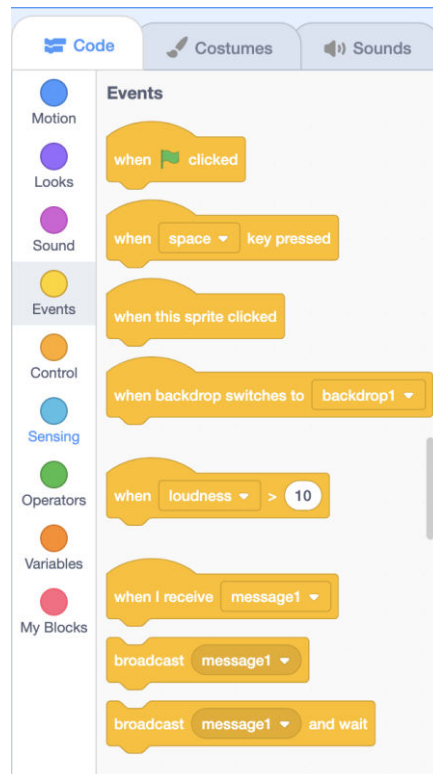
- The Stage is where all of your coded blocks perform.
- Some Of the things you could do with a stage are:
  1. control your character using your mouse in the stage.
  2. change the name of the character
  3. change the location of the character
  4. change the size of the character
  5. change the direction of the character
  6. add more characters.
  7. change the background.



# Blocks and its Function

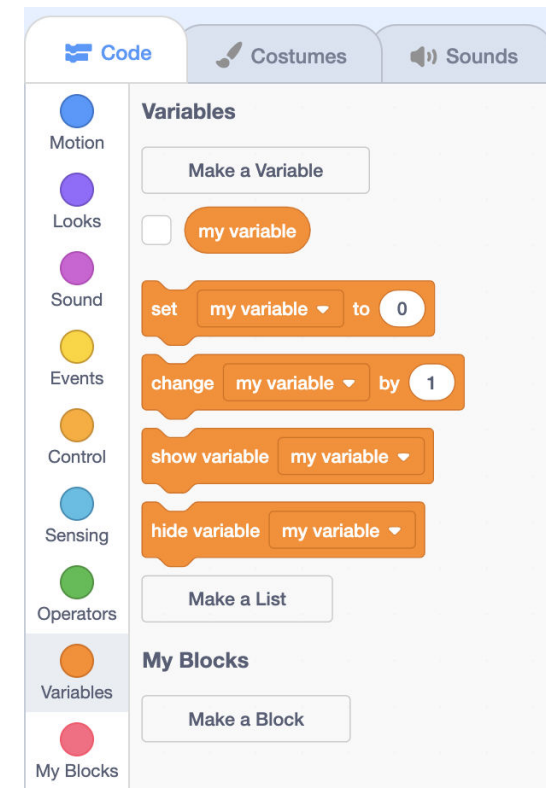
## Event Blocks

- These are blocks used when you want to start your program
- there is at least one event block found in every program.



## Variable Blocks

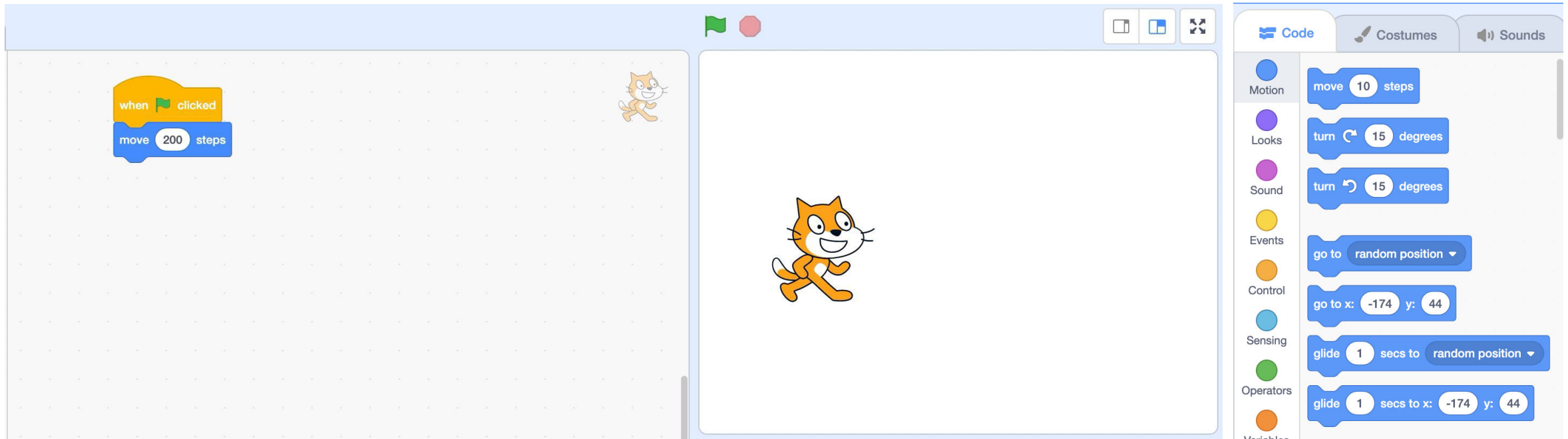
- Variables are block that you can make and store information in.
- Many people make variables to keep track of score or keep track of a timer, etc.
- They are very useful when you want to keep track of something



# Blocks and its Function

## Motion Blocks

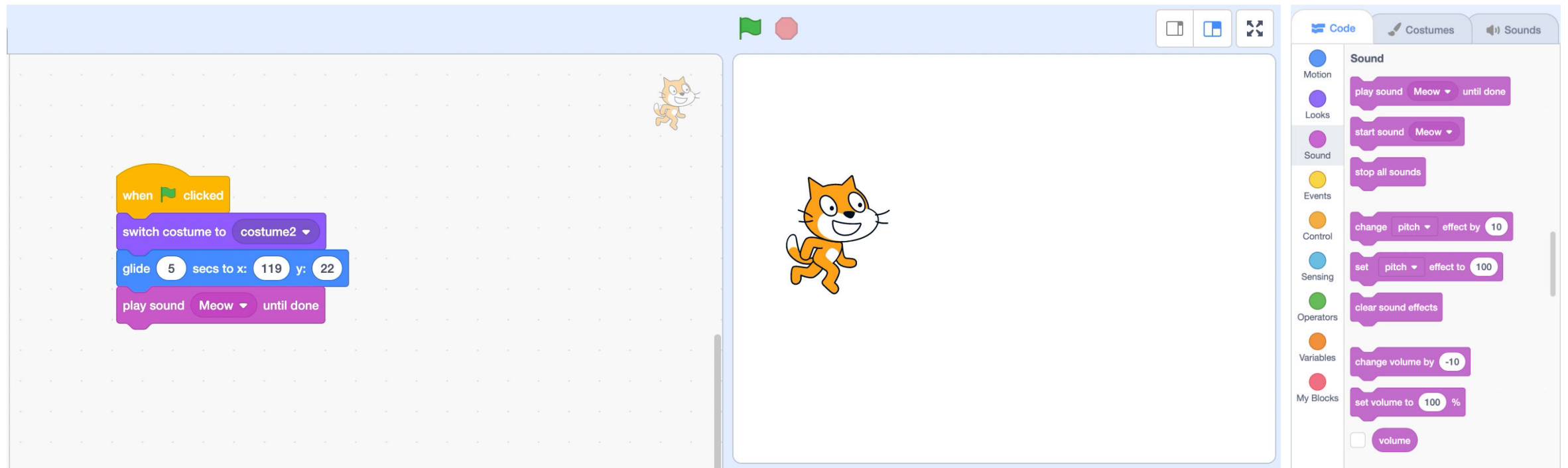
- These block change the movement of the sprite
- These blocks help your character move from one spot of the stage to another spot.



# Blocks and its Function

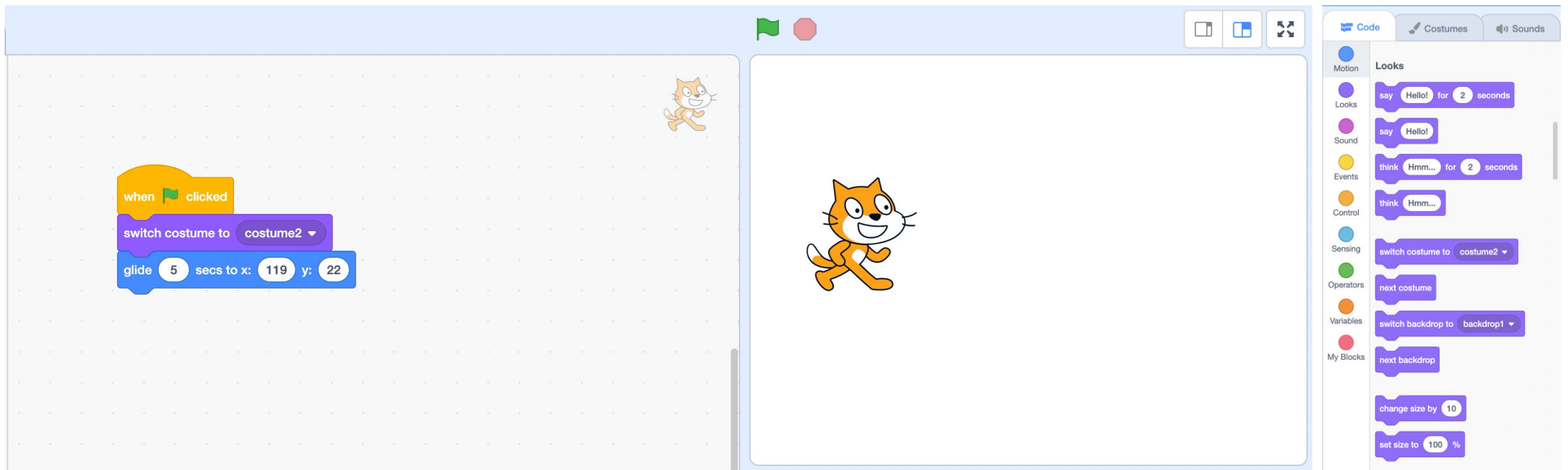
## Sound Blocks

- These block gives your spirit a voice
- It can play any sound you can find in the scratch data base.



# Blocks and its Function

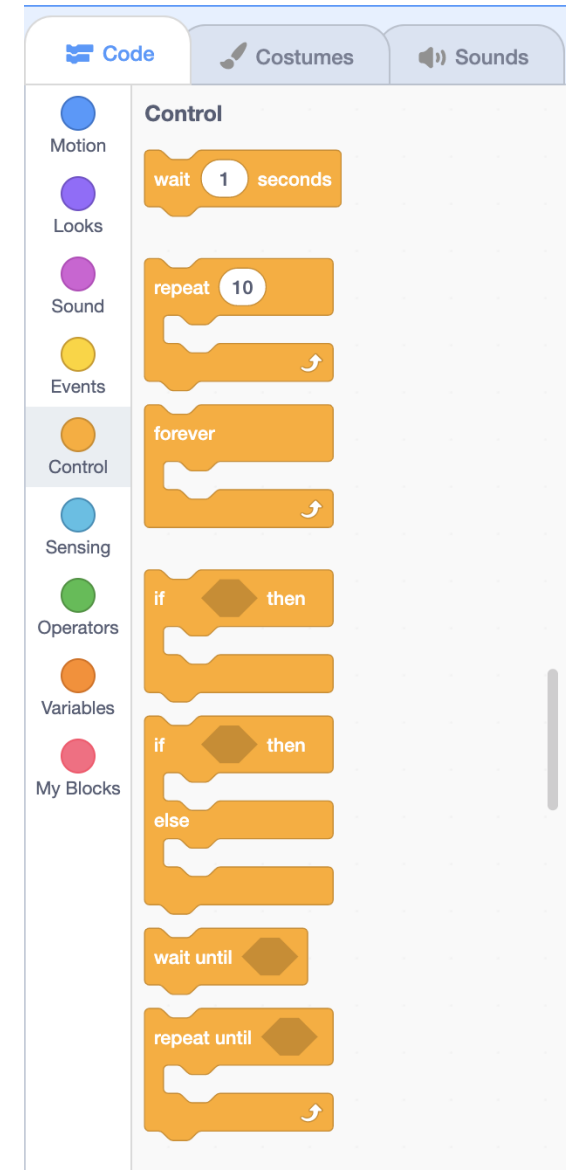
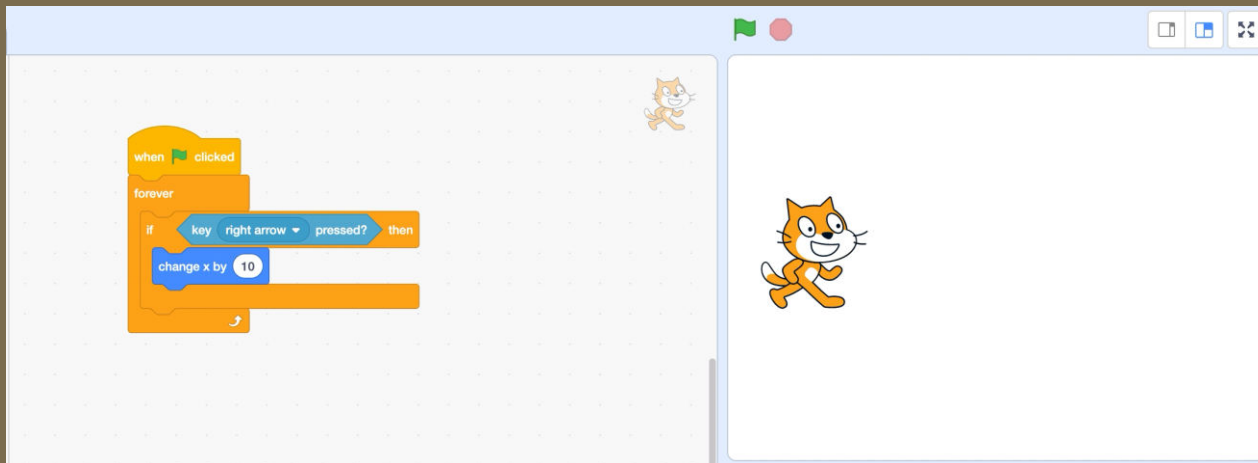
- Looks Block
- These block changes the way your character (sprite) looks during your program.



The image shows the Scratch programming environment. On the left, the Scripts area contains a script starting with a 'when green flag clicked' event block, followed by a 'switch costume to costume2' block, and a 'glide 5 secs to x: 119 y: 22' block. In the center, the Stage area displays a small orange cat sprite. On the right, the Looks block palette is visible, showing various blocks for changing a sprite's appearance, including 'say Hello! for 2 seconds', 'say Hello!', 'think Hmm... for 2 seconds', 'think Hmm...', 'switch costume to costume2', 'next costume', 'switch backdrop to backdrop1', 'next backdrop', 'change size by 10', and 'set size to 100 %'.

# If or else Statements

- If or Else statements are conditional statement
- These statements can be seen in almost every coding languages
- If given condition is true, then it will result in the given result

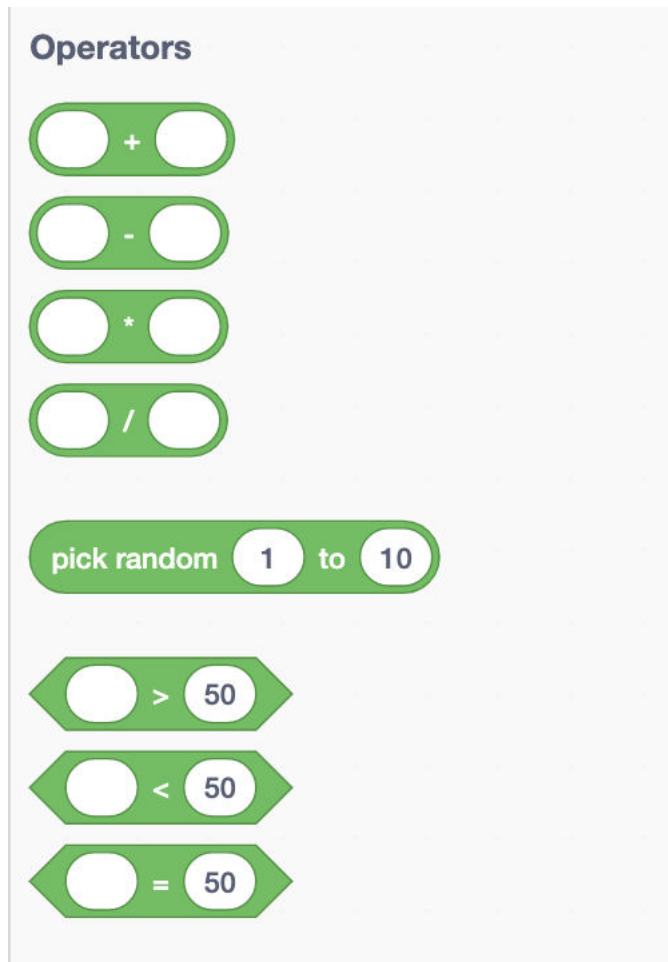




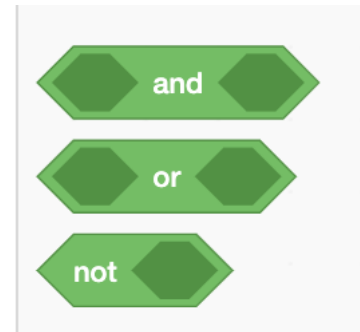
# Operators

- There are different types of operators in scratch and they are:

1. +
2. -
3. \*
4. <
5. >
6. =



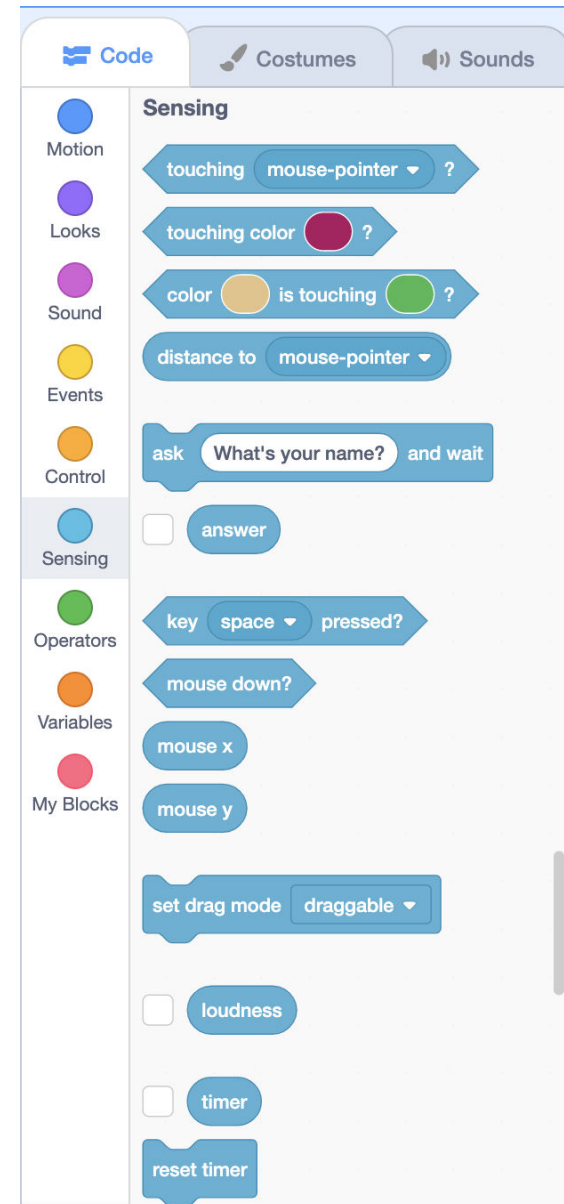
- Using operators in if-else statements



- There are different conditions like these shown above that can be used in if-else statements

# Blocks and Its Functions

- Sensing
  - These blocks are mostly used inside other blocks.
  - These are called Parameters
  - They set a boundary or a limit to what a conditional statement can do.



# Kahoot time!

<https://create.kahoot.it/share/scratch-basics/a6db581e-85bd-4cc4-920c-04c139cd403d>