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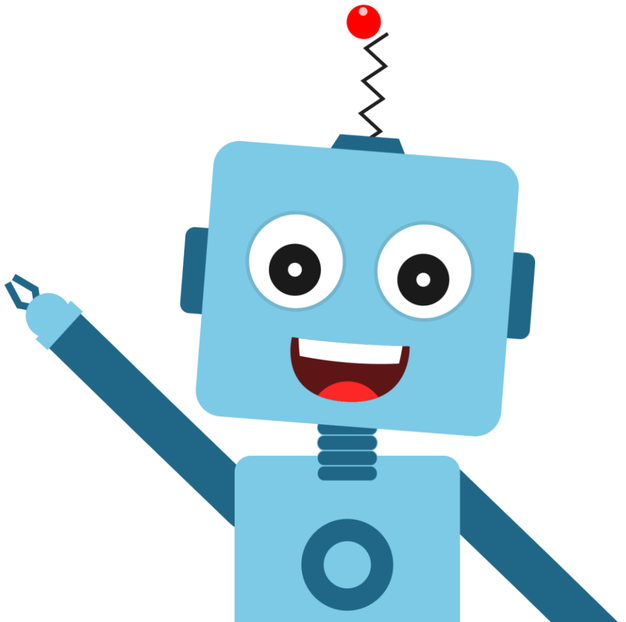
Working with Conditions

Session 4



What is Condition?

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- Life is full of conditions: A conditional statement is represented in the form of “**if…then**” and **“if…then…else”**.

- These statements **allow the program** to **check the conditions** by **testing a variable** against a value and act accordingly.

- A program that has **conditional statements** is called a **Conditional Program**, and the process is known as Conditional Programming.

if () then Block:

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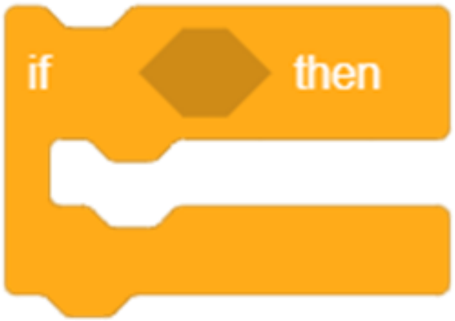
The **if () then** block will check whether the specified condition is true or not.



- If it is **true**, the blocks inside it will run, and then the script involved will continue.

- If the condition is **false**, the code inside the block will be ignored and the script will move on. The condition is checked only once.

ACTIVITY

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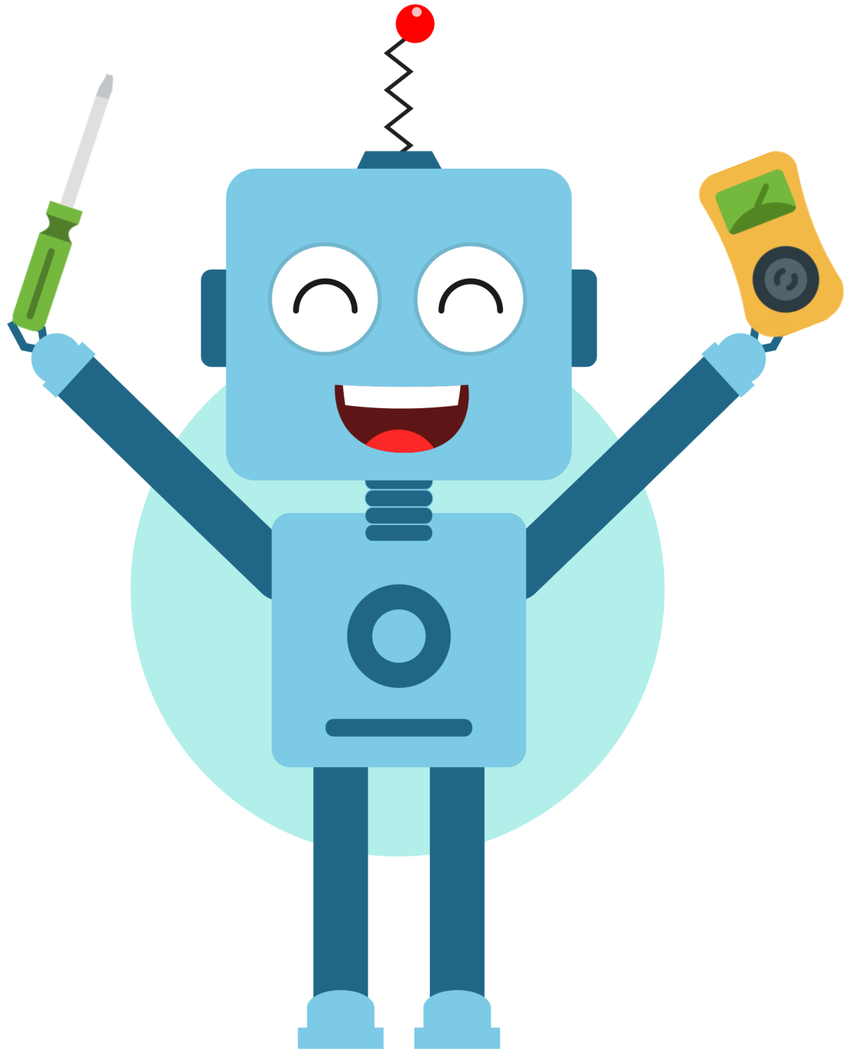
If () Then Block

- We're going to make a script that will make **Tobi glide to a random position on the Stage** whenever we **press the space key**.



ACTIVITY

- Add an **if () then** block.
- Place a **key () pressed**? block in the space of the if block
- Place **glide to () seconds** blocks under the if arm.
- Place a **forever** block around the if () then block.
- Add a **when flag clicked** block above to complete the script

Final Output

- Click the flag when done and press the space key.

ACTIVITY

If () then Else Block

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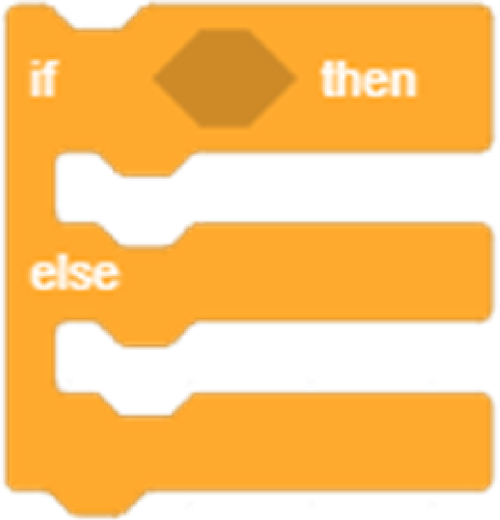
- The **if () then else** block will check whether the specified condition is true or not.

- If the condition is **true**, the code held inside the first C (below the if arm) will run. Then, the script will continue.

- If the condition is **false**, the code inside the second C (below the else arm) will run. (unlike the if () then block).



ACTIVITY

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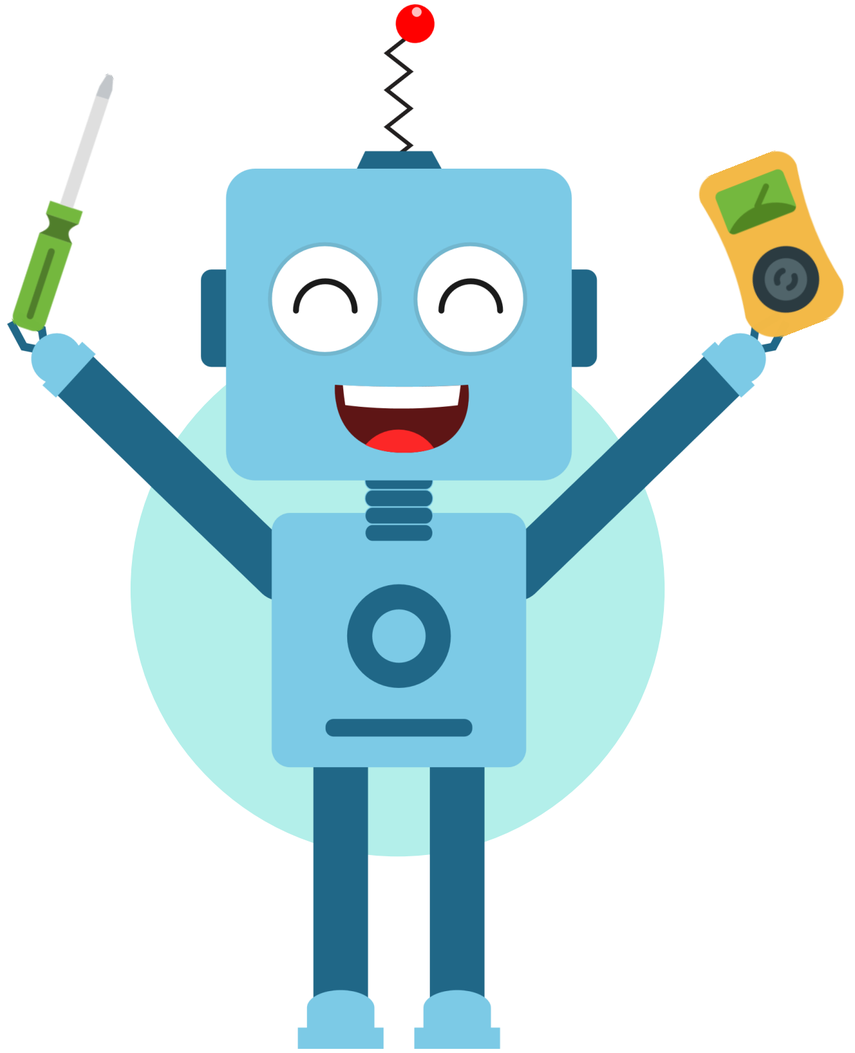
If () then Else Block

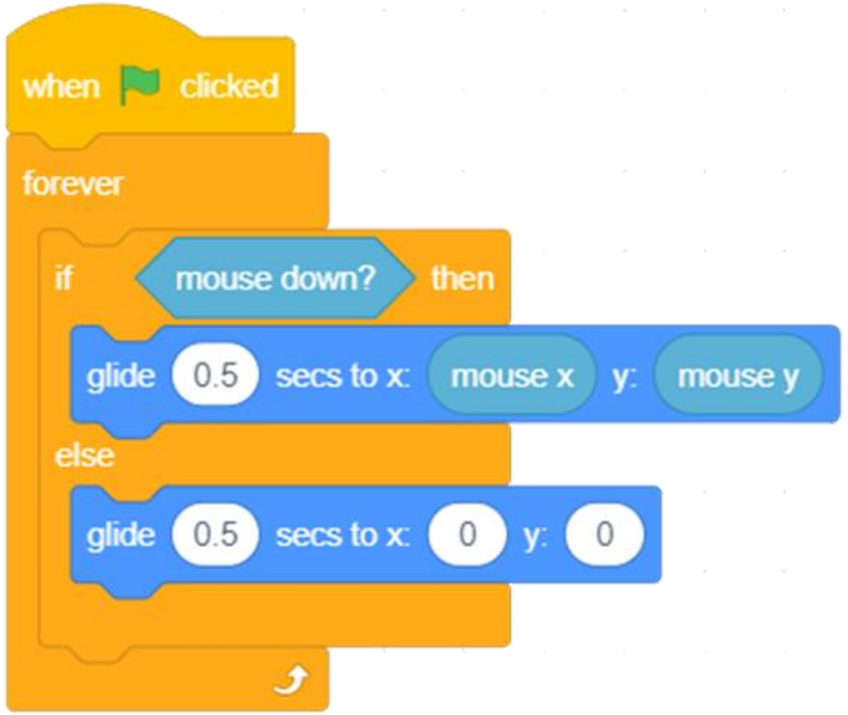
- We're going to make a script that will make **Tobi move towards the mouse cursor** whenever we click it.

- When we're not clicking it, he should go back to his default position in the center.



ACTIVITY

- Add an **if-else** block and place a **mouse-down**? block in the space of the if arm.
- If it is true, Tobi should glide towards the mouse. Therefore, add a **glide () secs to x: () y: ()** block and place mouse x and mouse y in their respective white spaces.
- If the condition is false, it will stay at the center. Thus, place another **glide () secs to x: () y: ()** block and write set x and y value to 0.
- Add a **forever block** to run the script continuously.
- Add a **when flag clicked** block to run the script.



Final Output

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- Click the **flag when** done and press the mouse.

ACTIVITY

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