

# ACTIVITY SHEET



## SESSION 1

## Introduction to PictoBlox

In this activity, we are going to understand and use some blocks in PictoBlox to create a script. The script will make a walking animation of Tobi on the stage of PictoBlox.

This activity sheet belongs to \_\_\_\_\_

### MATERIALS REQUIRED

- Computer / Tab / Laptop with PictoBlox Installed.

### PICTOBLOX INTERFACE

PictoBlox is a graphical programming software based on Scratch blocks and is the ideal companion for setting the first step into the world of programming.

**Block Coding**  
**Python Coding**

**Stage**  
The area where the sprite performs actions based on the script

**Stage Mode**  
Write scripts for the sprite and boards to interact with them in real-time

**Upload Mode**  
Write scripts for the board to control them even when disconnected from the computer

**Blocks**  
Puzzle-piece shapes used to write scripts

**Add Extension**  
For adding new palettes to the block palette

**Scripting Area**

**Script**  
A stack of blocks interlocked with one another in a specific order to perform a task.

**Sprite**  
An object, or a character, that performs actions based on the script

**Backdrops**  
Possible backgrounds of the stage

**Block Palette**

**Sprite**  
Tobi

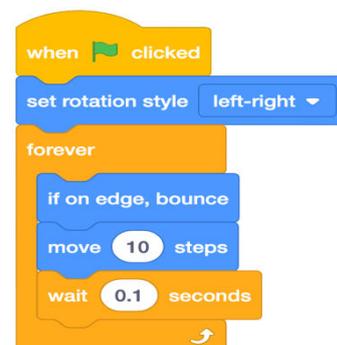
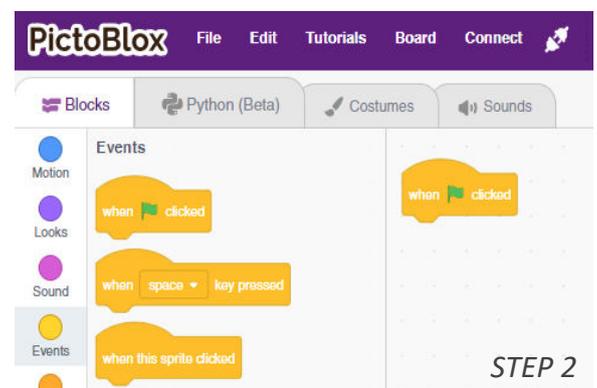
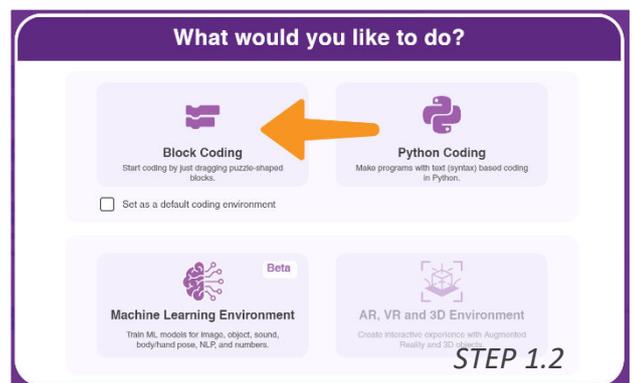
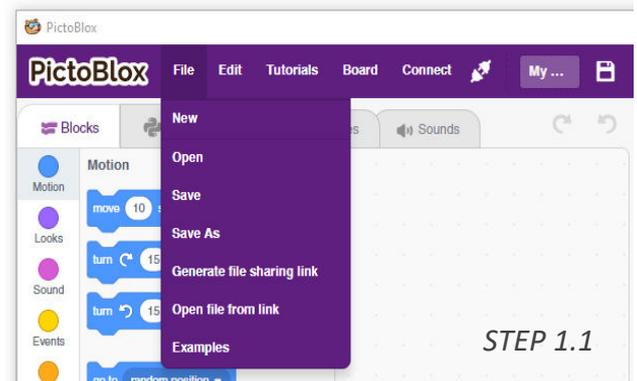
**Stage**  
Backdrops 2

## STEP-BY-STEP

Follow the steps below:

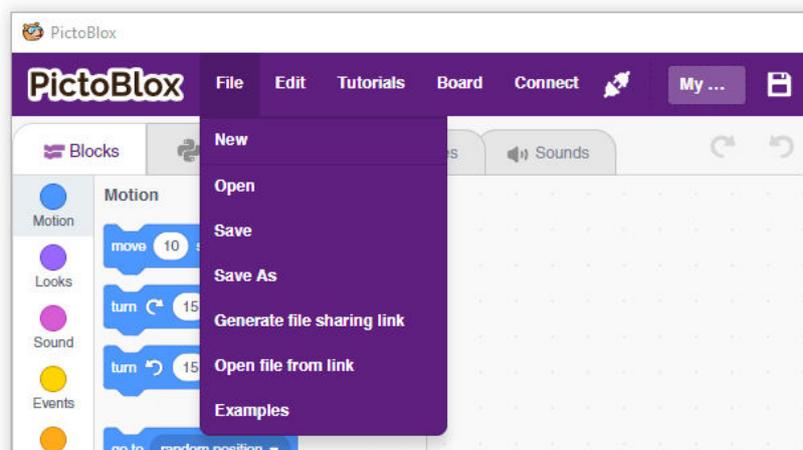
1. Create a New file in PictoBlox. Follow the steps if you are working on **Windows, macOS, or Linux**:
  - 1.1. Open **PictoBlox** and create a new file.
  - 1.2. Select the coding environment as **Block Coding**.
2. Open the **Events** palette and drag and drop the **when flag clicked** block into the scripting area. The **when flag clicked** block is a special type of block called **hat** block. *It is used to start a script. Using this particular hat block you can run the script by clicking on the green flag above the stage.*
3. Next, open the **Control** palette and drag and drop the **forever** block below the **when flag clicked** block. *This block is used when you want a set of blocks to keep running until the script is stopped manually.*
4. Then, open the **Motion** palette and drag and drop the **move () steps** inside the **forever** block. *This block is used to move the sprite by a specified number of steps. In our case, it is 10.*
5. Next, open the **Control** palette and drag and drop the **wait () seconds** block below the **move () steps** block and change the delay value to 0.1 seconds.
6. Open the **Motion** palette and drag and drop the **if on edge, bounce** block inside the **forever** block. *This block detects whether the sprite has touched the edge of the stage or not and change the direction if it has.*
7. Go the **Motion** palette and drag and drop the **set rotation style ()** below the **when flag clicked** block and select **left-right** from the drop-down.

The script is now complete! Run it by clicking the **green flag**.

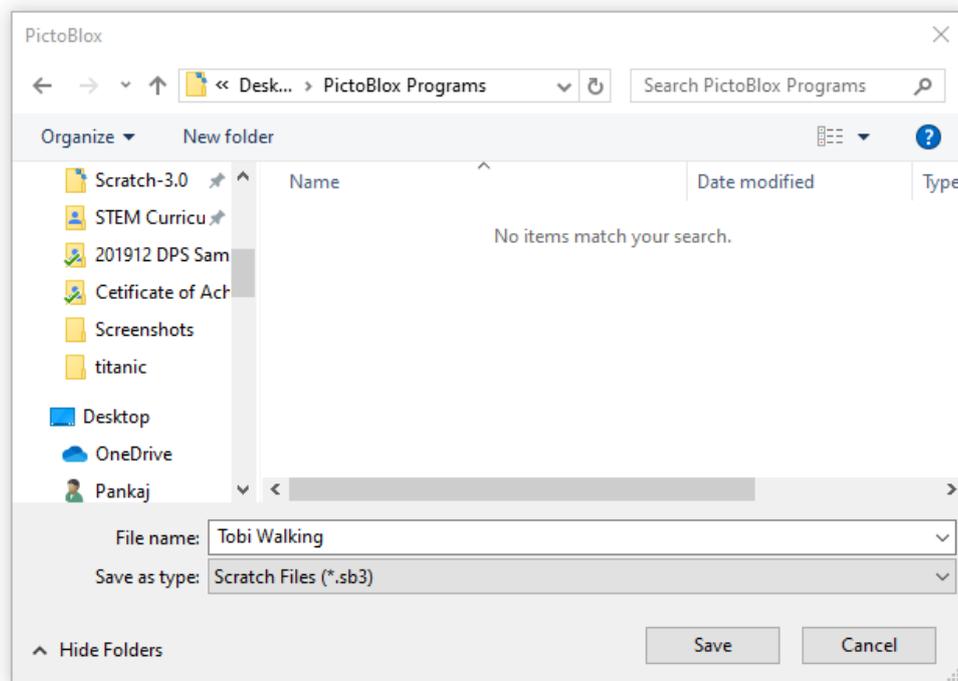


## SAVING THE PROGRAM

1. To save the program, click on **File > Save As**.



2. A window will pop up. Choose the location as Desktop or any other relevant folder. Name the file **Tobi Walking**.



3. Click on **Save**. The file is saved with a .sb3 extension on your computer.