SESSION - 1
INTRODUCTION
TO
PYTHON

Learning Outcomes:

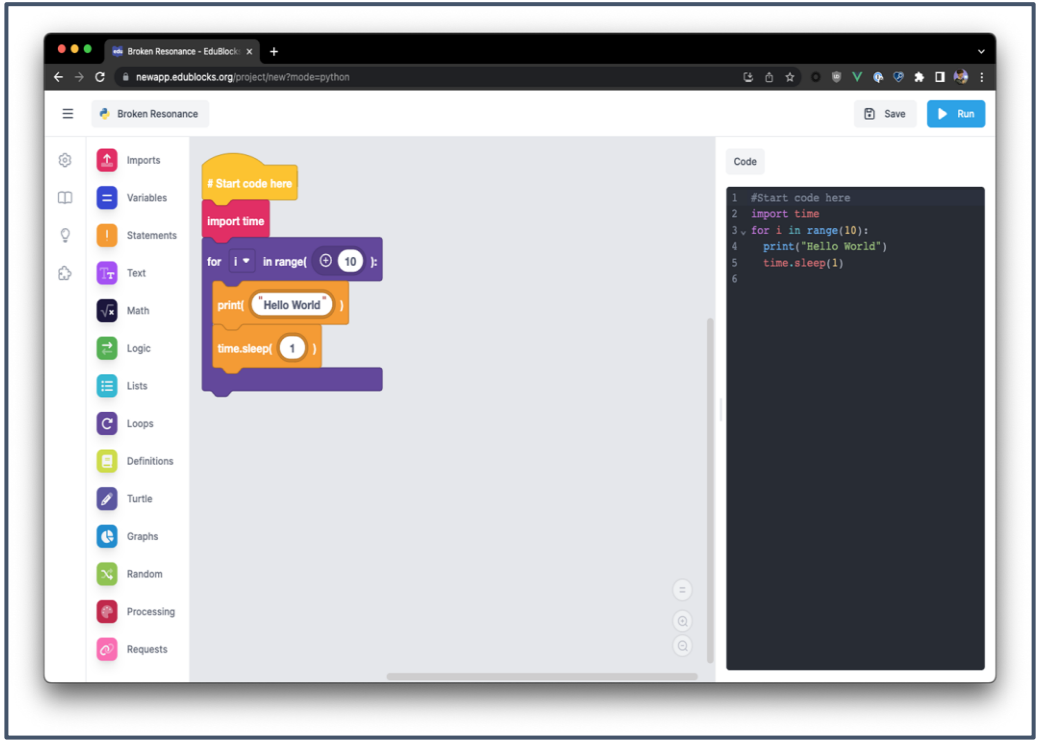
- **Remember**: The students will list different types of blocks being learnt in the session .
- **Understand**: - They will be introduced to the Python Programming Language

  - They will understand the use of Print command .

  - They will also understand different data types .
- **Apply**: They will learn to apply and check the execution of the Print command.
- **Analyze**: They will check their understanding by developing a code.
- **Create**: They will create the code in EduBlocks

Introduction to EDUBLOCKS

EduBlocks is a visual block-based programming tool that helps teachers to introduce text-based programming languages, like Python, to children at an earlier age via a drag and drop programming experience



The Interface

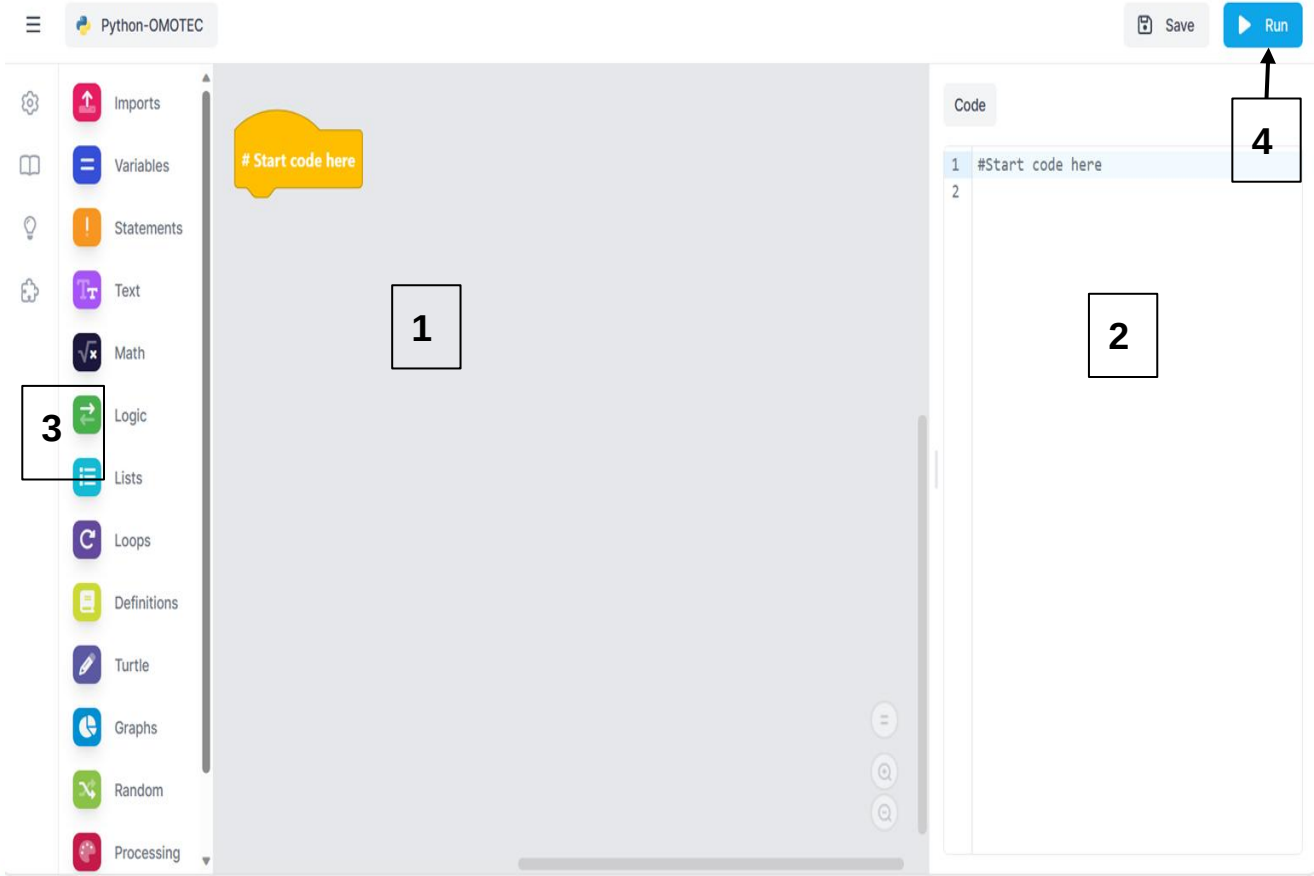
About the Interface :

1- Script Area - We write the code here .

2- Code in the syntax format will be displayed here .

3 - Block Area - We can select and drag the required blocks from this area

4- Click on the RUN Button to execute the written code



Why Learn On EduBlocks ?

EduBlocks is the easiest way to make the transition from blocks to text, here's why:

- **Text on the blocks**: EduBlocks displays the Python text on the block so you can see exactly what you're coding.
- **Python view**: The main part of EduBlocks is the visual block editor but once you've completed your block code, you can switch straight to a Python editor.
- EduBlocks has many different **"modes"** that can be used with external hardware or just in the browser. Modes include:

  - **Python 3**
  - BBC micro:bit
  - Raspberry Pi
  - CircuitPython

How To Access Edublocks ?

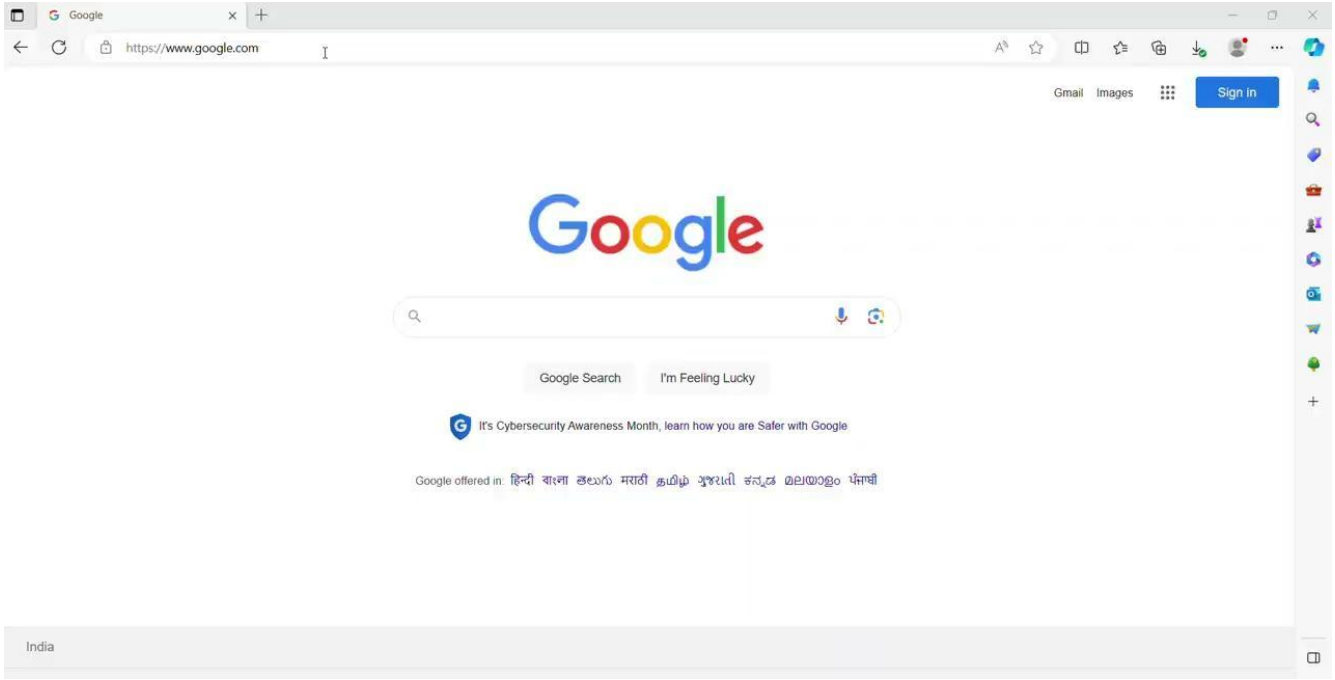
1. Type : https://edublocks.org/ in the address bar of your Browser .

2. Click on Start Coding

3. Select Python3

4. Start Coding

Reference Video :



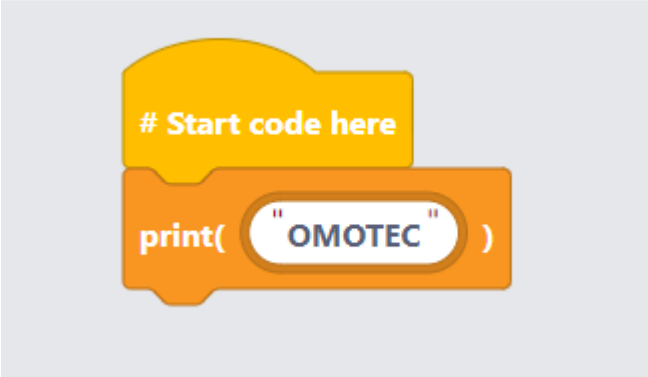
Print() Function

- The print() function prints the specified message to the screen, or other standard output device.
- The message can be a string, or any other object, the object will be converted into a string before written to the screen.

TASK 01:-

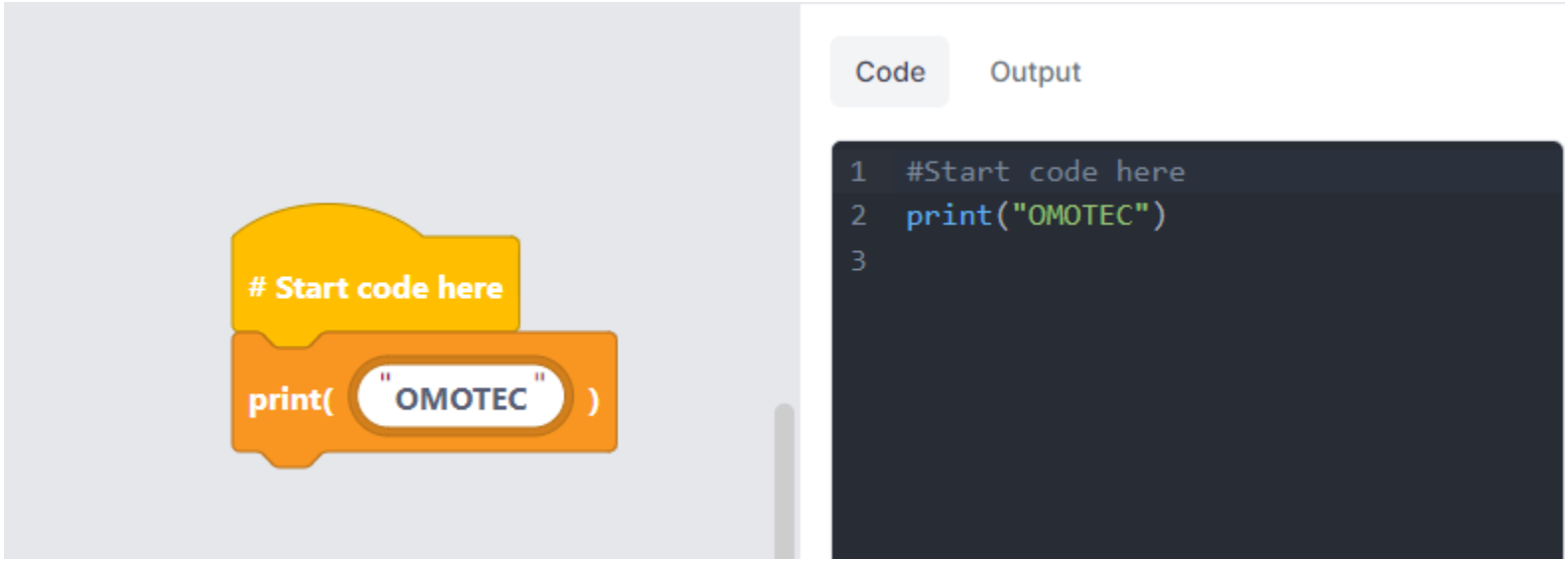
</>WRITE A PROGRAM TO PRINT YOUR NAME

Program



Connect print "Hello World" block and change the text to “your name”

Program


# Start code here
print(" OMOTEC ")
Code
Output
1 #Start code here
2 print("OMOTEC")
3

Output


Save
Run
# Start code here
print(" OMOTEC ")
Code
1 #Start code here
2 print("OMOTEC")
3
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OMOTEC

TASK 02:-

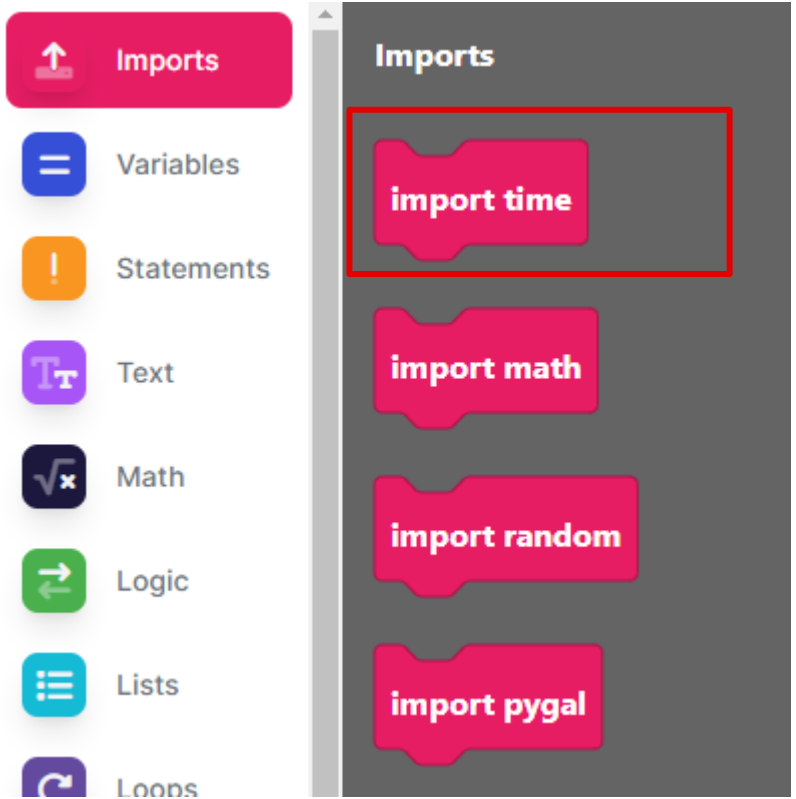
</>WRITE A PROGRAM TO PRINT YOUR NAME AND MESSAGE WITH A DELAY FUNCTION

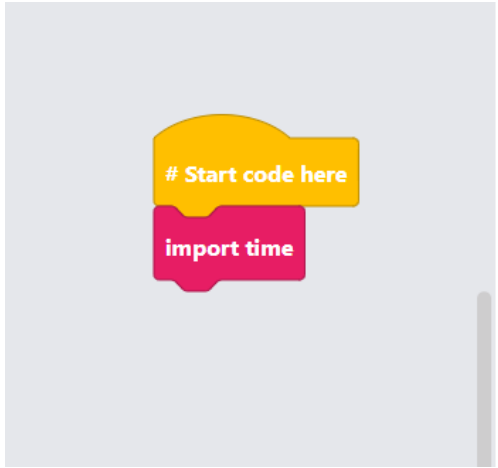
Delay Functions

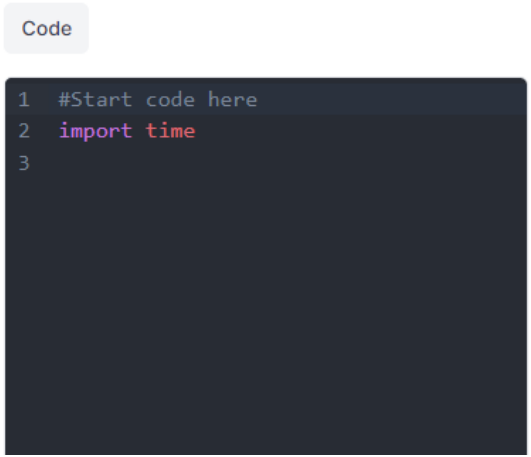
- **import time:-** When we say import time, we're telling the computer to use a special tool called "time" that helps us keep track of time. Just like you use a clock to know when it's time for different activities, the computer uses the "time" tool to know how much time has passed.

- **time.sleep():-**This function is like telling the robot to take a little break or pause for a while. You can tell the robot to pause for a specific amount of time. For example, you can say, "Robot, pause for 5 seconds." The robot will wait for 5 seconds before doing the next thing you tell it to do.

Program Step 1:-

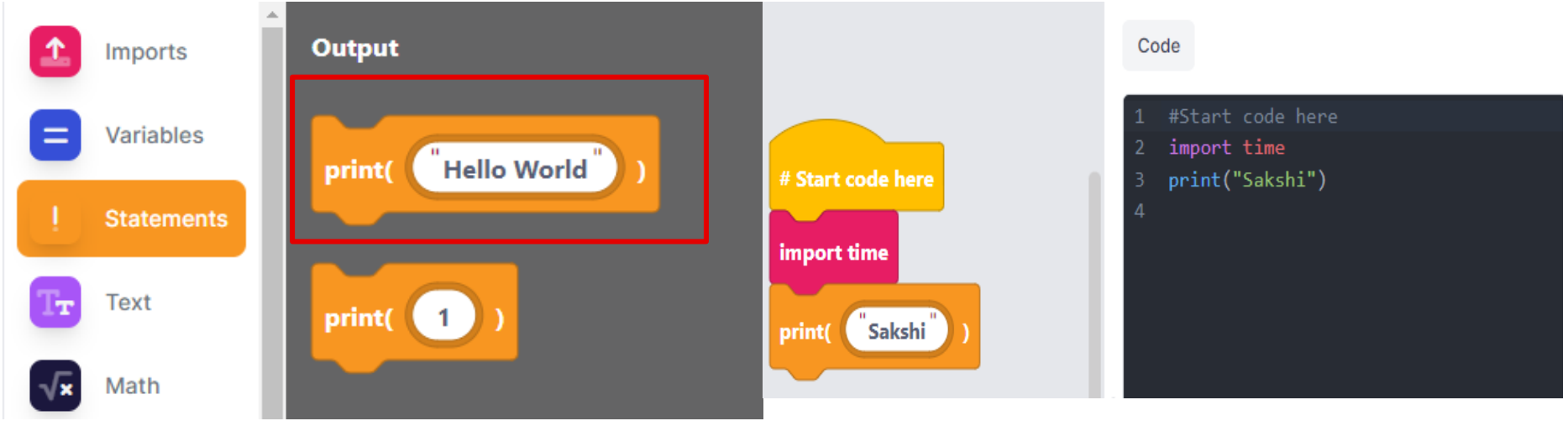






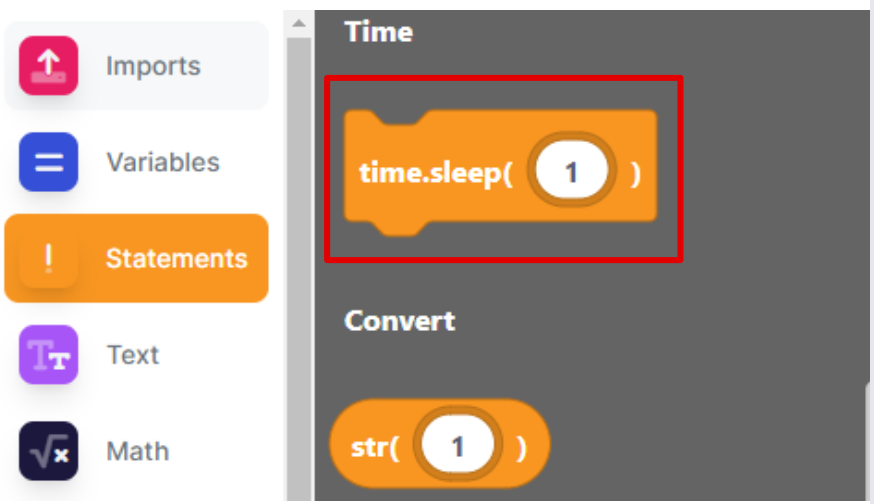
Add an time library from imports blocks

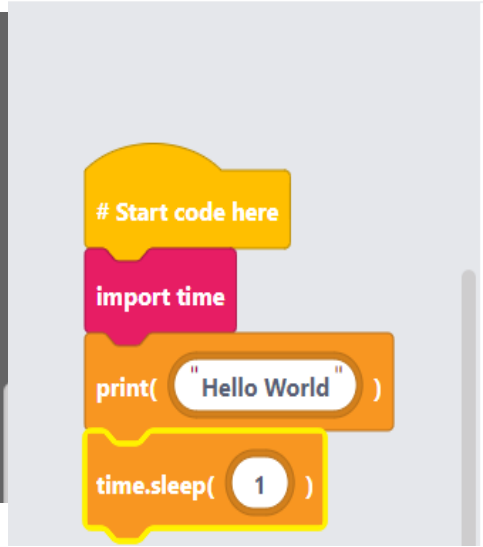
Program Step 2:-



Connect print "Hello World" block and change the text to “your name”

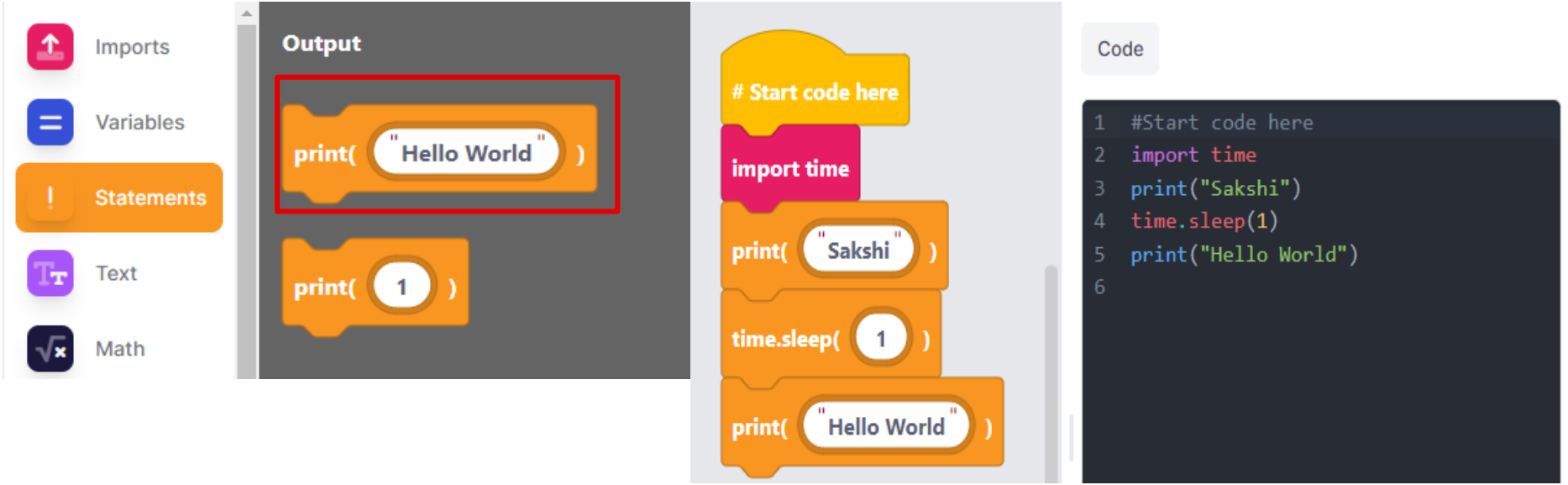
Program Step 3:-





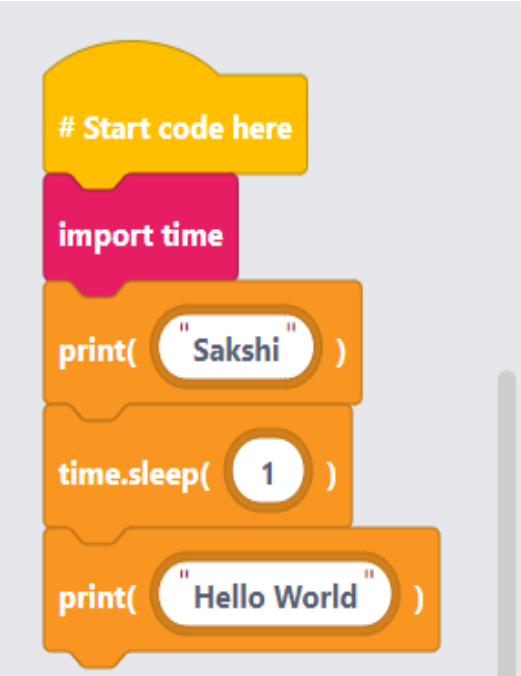
Connect print “time.sleep()" block for delay 1 sec

Program Step 4:-



Connect print "Hello World" block and change the text to “message”

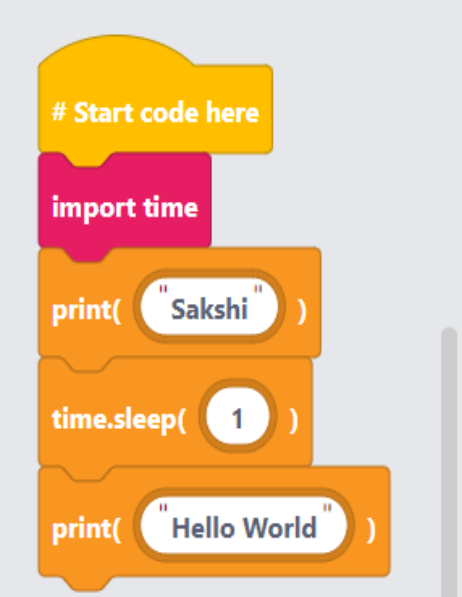
Program



Code

```
1  #Start code here
2  import time
3  print("Sakshi")
4  time.sleep(1)
5  print("Hello World")
6
```

Output



Code

```
1  #Start code here
2  import time
3  print("Sakshi")
4  time.sleep(1)
5  print("Hello World")
6
```

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```
Sakshi
Hello World
```

ACTIVITY SHEETS

Question:1

What will the output be from the following code?

print(Hello world!)

A. Hello world!
B. Syntax error
C. hello
D. print Hello world

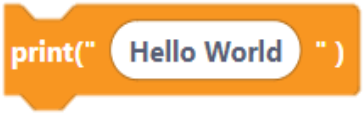
Question:2

Print statement is

A. Outputs the message on screen
B. Gets the data from user
C. A decision
D. None of the above

Question:3

Which function is used to Print the data at run time?



Question:4

What is the function name to give a delay in the code?

A. Print function
B. Gets the data from user
C. time.sleep
D. None of the above

Question:5

What is the name to the library to give a delay in the code?

A. import pygal
B. import time
C. time.sleep
D. import graph

Homework

</>Write a program in Python to display your name , age and school name .