OMO TEC
ON MY OWN TECHNOLOGY

SESSION - 10
PROCESSING

Learning Outcomes:

- **Remember**: The students will recall about the libraries learnt .
- **Understand**: They will focus on understanding the use of a Processing Library .
- **Apply**: They will learn to apply Processing Library for drawing shapes.
- **Analyze**: They will check their understanding by developing a code .
- **Create**: They will create the code in EduBlocks

PROCESSING IN PYTHON

Remember & Understanding

Processing is a free graphical library and integrated development environment (IDE) built for the electronic arts, new media art, and visual design communities with the purpose of teaching non-programmers the fundamentals of computer programming in a visual context.

Processing uses the Java language, with additional simplifications such as additional classes and aliased mathematical functions and operations. It also provides a graphical user interface for simplifying the compilation and execution stage.

Remember & Understanding

PROCESSING IN PYTHON

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Used to set size of output screen.

Used to set background colour of output screen.

Used to run/process the created program.

Used to set colour mode(BW/RGB).

Used to set Draw line. Takes 4 parameters(x,y,x1,y1)

PROCESSING IN PYTHON

Used to draw circle/ellipse. Takes 4 parameters(x,y,width,height).

Used to draw triangle. Takes 4 parameters(startX,startYwidth,height).

Used to fill shape with colour. Takes 3 parameters(r,g,b).

Apply & Create

TASK 01:-

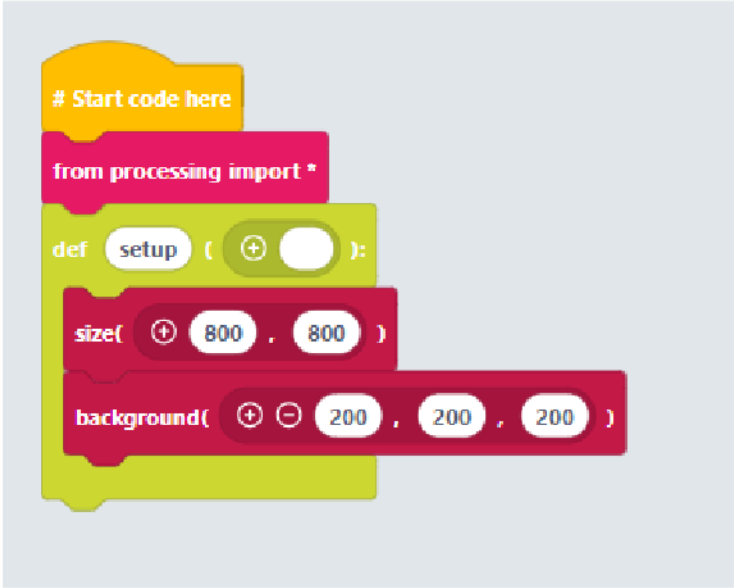
</> WRITE A CODE TO DRAW THE SHAPES USING PROCESSING

Program

- Import processing from the Import block

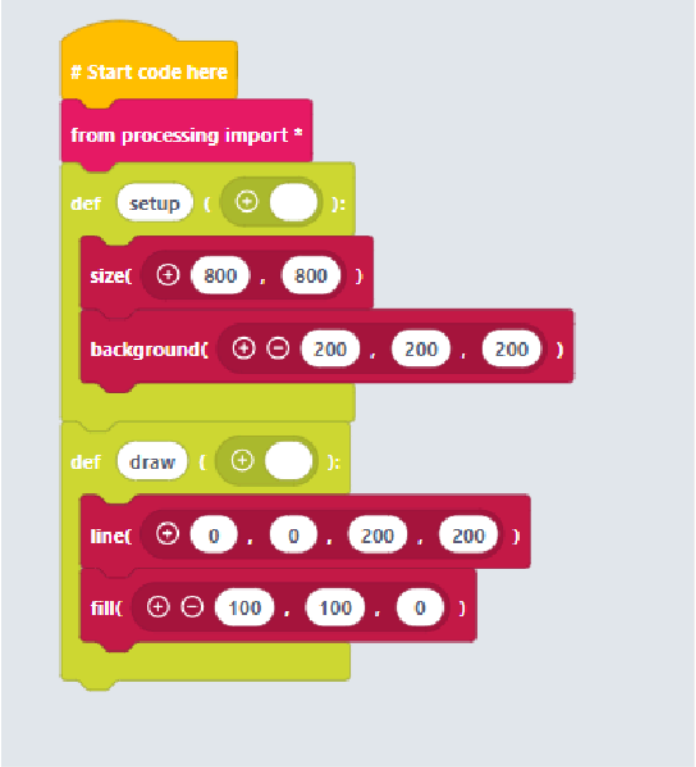
Program

Define the setup function and Put the size and background block from the processing



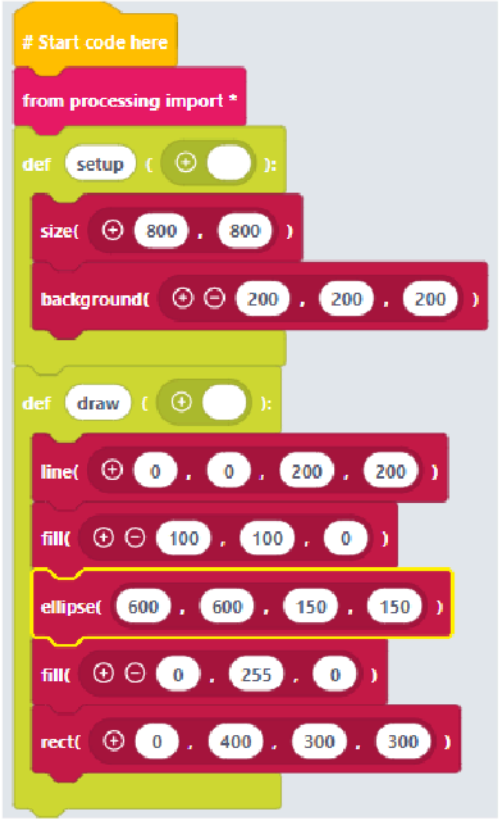
Program

Define the setup function
and Put the Line and fill block
from the processing



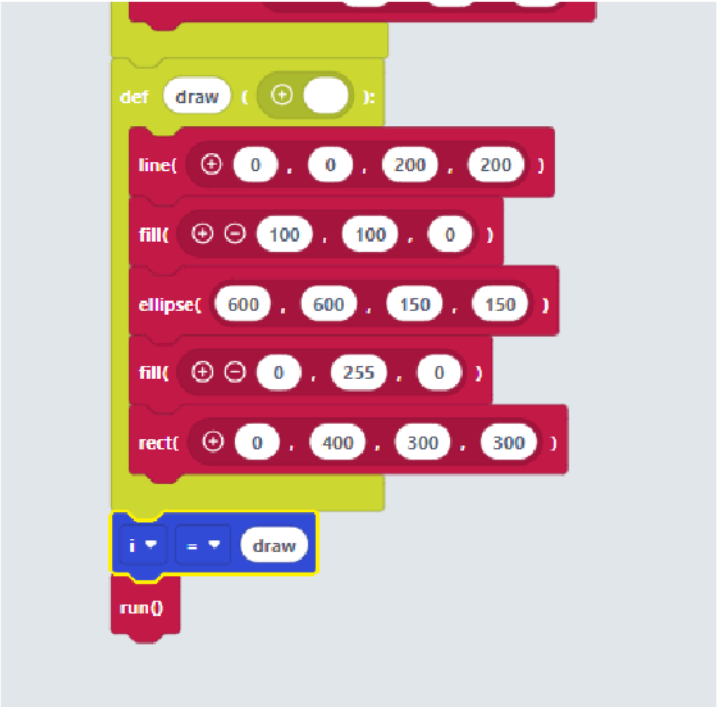
Program

- Put the ellipse and fill block from the processing and also the rect block with all the dimensions



Program

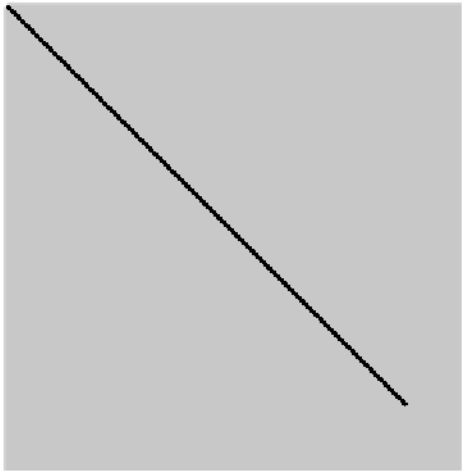
- Create a variable of i
- and now take the run block from the processing

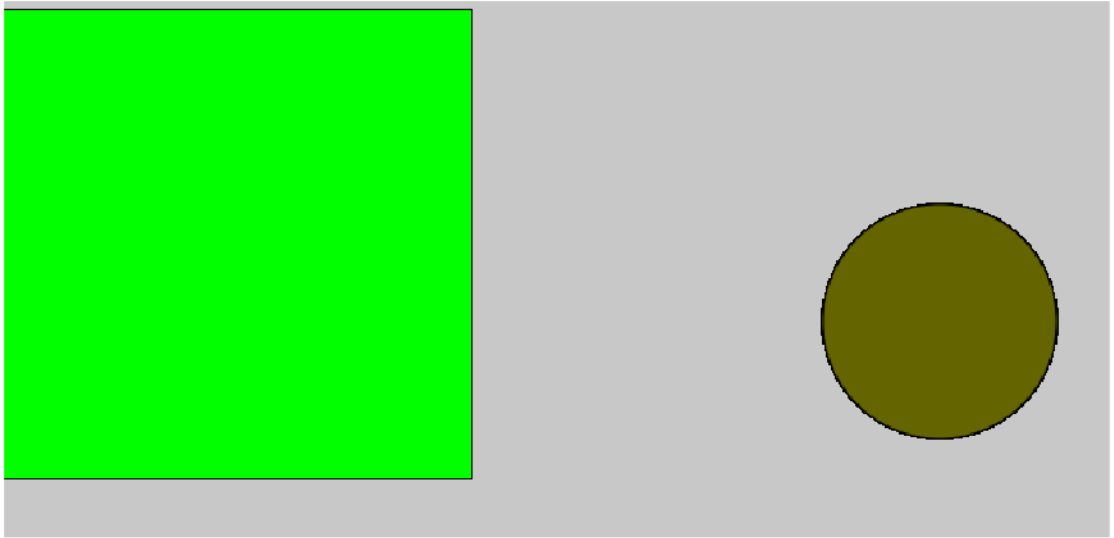


Syntax

```
#Start code here
from processing import *
def setup():
    size(800, 800)
    background(200, 200, 200)
def draw():
    line(0, 0, 200, 200)
    fill(100, 100, 0)
    ellipse(600, 600, 150, 150)
    fill(0, 255, 0)
    rect(0, 400, 300, 300)
i = draw
run()
```

Output





ACTIVITY SHEETS

Question 1:
Size block is used for _____.

A. To change the size
B. To set the size
C. To vary the Size
D. None of the above

Question 2:
“noFill()” block is used for____.

A. Create hollow shapes
B. Create filled shapes
C. Creating shaded shapes
D. None of the above

Question 3:
How many parameters “triangle()” block required?

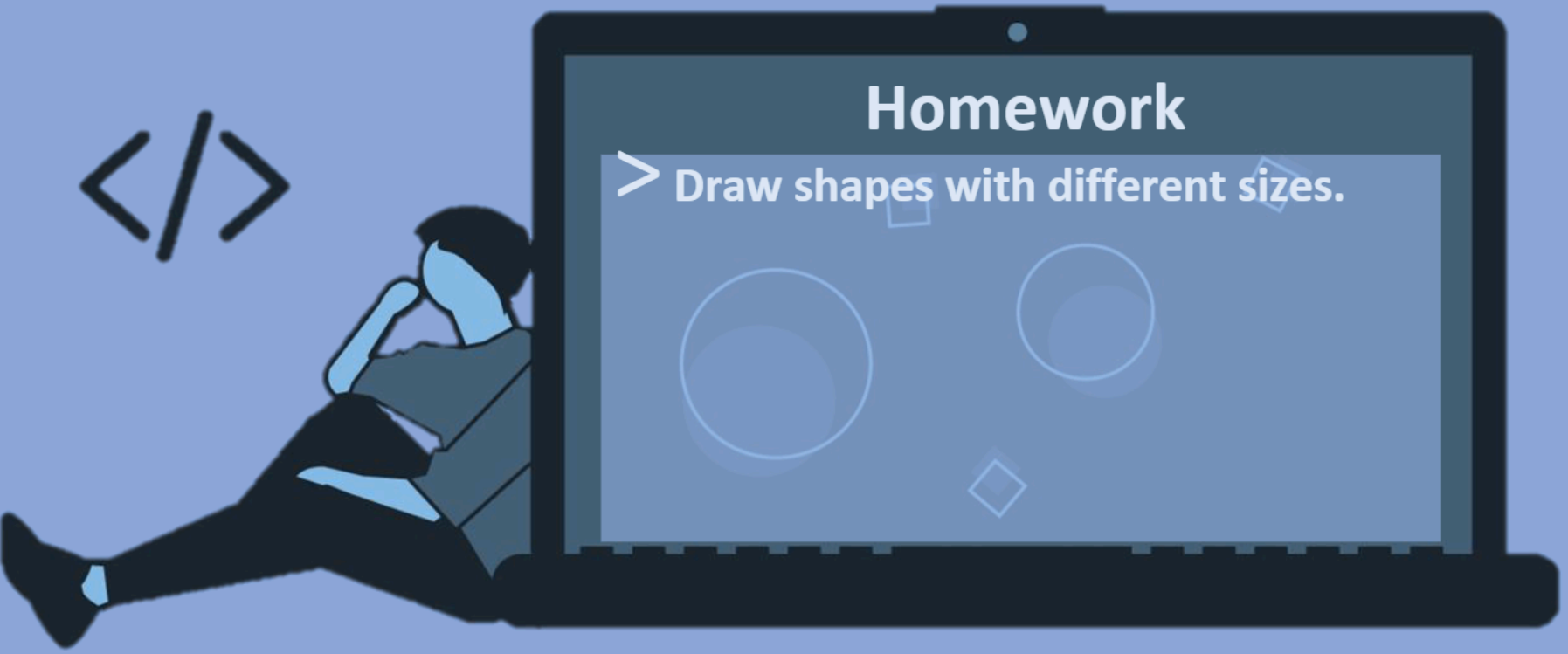
A. 4
B. 3
C. 8
D. 6

Question 4:
What is the function of “run()” block?

A. To start code
B. To end code
C. To run the processing code
D. None of the above

Question 5:
Can we use size block outside setup?

A. Yes
B. No


Homework
> Draw shapes with different sizes.