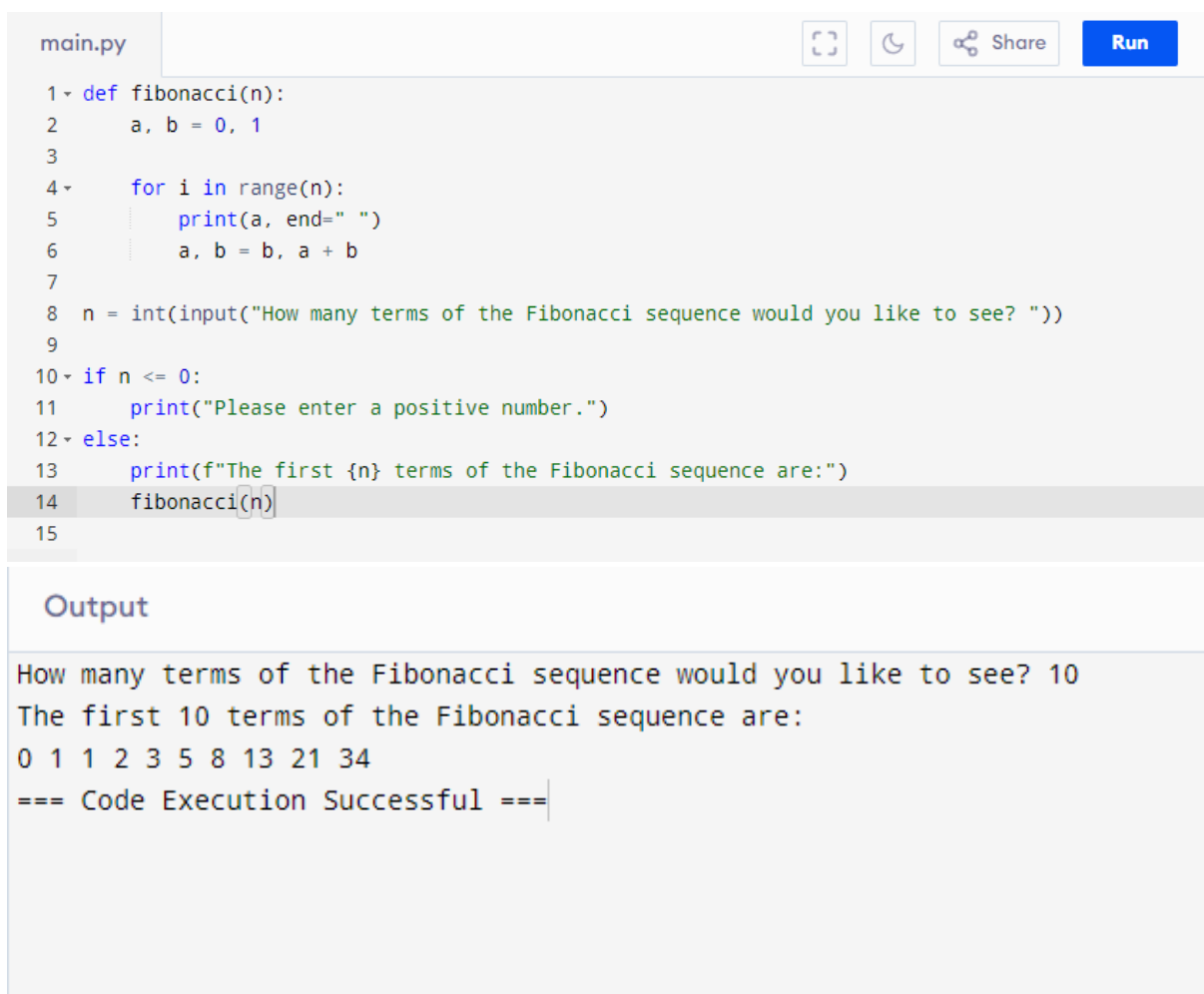


# IEEE SRM SB R&D DOMAIN

## SECTION – 1

1. What machine learning algorithm is suitable for this graph?

A logistic regression model



The screenshot shows a Python code editor with a file named 'main.py'. The code defines a 'fibonacci' function and uses it to generate the first 10 terms of the Fibonacci sequence. The output section shows the user input '10' and the resulting sequence: '0 1 1 2 3 5 8 13 21 34'. The code execution was successful.

```
main.py
1 def fibonacci(n):
2     a, b = 0, 1
3
4     for i in range(n):
5         print(a, end=" ")
6         a, b = b, a + b
7
8 n = int(input("How many terms of the Fibonacci sequence would you like to see? "))
9
10 if n <= 0:
11     print("Please enter a positive number.")
12 else:
13     print(f"The first {n} terms of the Fibonacci sequence are:")
14     fibonacci(n)
15
```

Output

```
How many terms of the Fibonacci sequence would you like to see? 10
The first 10 terms of the Fibonacci sequence are:
0 1 1 2 3 5 8 13 21 34
=== Code Execution Successful ===
```

3. Which of the following data structures uses a First In First Out (FIFO) approach?

Answer : Queue

4. Which of the following is a valid variable name in Python?

Answer : variable\_1

5. Which of the following sorting algorithms is considered the fastest in average case?

Answer : Merge Sort