IEEE SRM SB R&D DOMAIN

SECTION – 1

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

   A logistic regression model

2. main.py

```python
def fibonacci(n):
    a, b = 0, 1

    for i in range(n):
        print(a, end=" ")
        a, b = b, a + b

n = int(input("How many terms of the Fibonacci sequence would you like to see? "))

if n <= 0:
    print("Please enter a positive number.")
else:
    print(f"The first {n} terms of the Fibonacci sequence are:")
    fibonacci(n)
```

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