

EXPERIMENT 15

TO IMPLEMENT SECOND ORDER HOMOGENIOUS RECURRENCE RELATION

PROGRAM:

```
1 def recurrence(n):
2     if n == 0:
3         return 1
4     elif n == 1:
5         return 2
6     else:
7         return 2 * recurrence(n - 1) + 3 * recurrence(n - 2)
8 terms = 10
9 print("Second Order Homogeneous Recurrence Series:")
10 for i in range(terms):
11     print(recurrence(i), end=" ")
```

OUTPUT:

```
Second Order Homogeneous Recurrence Series:
1 2 7 20 61 182 547 1640 4921 14762
=== Code Execution Successful ===
```