**ASSIGNEMENT: 4**

Q1. Print series 0,3,8,15,24,35,48,63,80,99 given n = 10

**#include <stdio.h>**

**int** **main() {**

**int n = 10;**

**int i;**

**for (i = 0; i < n; i++) {**

**int term = i \* (i + 1);**

**printf("%d ", term);**

**}**

**return 0;**

**}**

**output**

**0 2 6 12 20 30 42 56 72 90**

**=== Code Execution Successful ===**

**2.** Print series 1, 2, 4, 8, 16, 32, 64. given n = 8

**#include <stdio.h>**

**int** **main() {**

**int n = 64;**

**int i, num = 1;**

**printf("Series: ");**

**for (i = 1; num <= n; i++) {**

**printf("%d ", num);**

**num \*=** **2; // Multiply by 2 for each iteration to get the next number in the series**

**}**

**return 0;**

**}**

**Series: 1 2 4 8 16 32 64**

**=== Code Execution Successful ===**

**3.** print Sum of Even and sum of odd values between 1 to 50

**#include <stdio.h>**

**int** **main() {**

**int i;**

**int sum\_even = 0, sum\_odd = 0;**

**// Loop through numbers from 1 to 50**

**for (i = 1; i <= 50; i++) {**

**if (i % 2 == 0) {**

**// If the number is even, add it to sum\_even**

**sum\_even += i;**

**} else {**

**// If the number is odd, add it to sum\_odd**

**sum\_odd += i;**

**}**

**}**

**printf("Sum of even numbers from 1 to 50: %d\n", sum\_even);**

**printf("Sum of odd numbers from 1 to 50: %d\n", sum\_odd);**

**return 0;**

**}**

**Output:**

**Sum of even numbers from 1 to 50: 650**

**Sum of odd numbers from 1 to 50: 625**

**=== Code Execution Successful ===**