Lab 6 outputs

➢ Task 1:

Which loop system would be better for user input. Justify your answer by creating a program that takes a value and adds it to a variable and prints it repeatedly until the user enters a zero value.

- ### Answer:

    While Loop.

- ### Output:

```
D:\PF LAB\LAB 6>gcc Sum_until_zero_input.c -o Sum_until_zero_input.exe

D:\PF LAB\LAB 6>Sum_until_zero_input.exe
Enter a number:10
Sum:10
Enter a number:8
Sum:18
Enter a number:9
Sum:27
Enter a number:5
Sum:32
Enter a number:0
User entered 0
```

➢ Task 2:

Write a program to check whether a given number is a multiple digit number or not.
Example:
- 123 is a multiple digit number.
- 6 is not a multiple digit number.

Using the above program integrate the number if it is a prime or composite number.

- ### Output:

```
D:\PF LAB\LAB 6>gcc digits_counter_and_prime_number_checker.c -o digits_counter_and_prime_number_checker.exe

D:\PF LAB\LAB 6>digits_counter_and_prime_number_checker.exe
Enter a number:567
567 is 3 digit number
567 is a composite number
```

➢ Task 3:

Write a program to print the following series: 1, 2, 3, 5, 8, 13.

● Output:

```
D:\PF LAB\LAB 6>gcc 1_2_3_5_8_13_SEQUENCE.c -o 1_2_3_5_8_13_SEQUENCE.exe

D:\PF LAB\LAB 6>1_2_3_5_8_13_SEQUENCE.exe
Enter how many terms do you want to print:8
1 2 3 5 8 13 21 34 55
```

➢ Task 4:

Write a program to print the following series: 65536, 32768, 10922, 2730, 546, 91,13, 1, 0.

● Output:

```
D:\PF LAB\LAB 6>gcc 65536_32768_10922_2730_546_91_13_1_0_SEQUENCE.c -o 65536_32768_10922_2730_546_91_13_1_0_SEQUENCE.exe

D:\PF LAB\LAB 6>65536_32768_10922_2730_546_91_13_1_0_SEQUENCE.exe
65536 32768 10922 2730 546 91 13 1 0
```

➢ Task 5:

Write a program to print the following series: 1, 2, 2, 4, 8, 32, 256, 8192, 2097152.

● Output:

```
D:\PF LAB\LAB 6>gcc 1_2_2_4_8_32_256_SEQUENCE.c -o 1_2_2_4_8_32_256_SEQUENCE.exe

D:\PF LAB\LAB 6>1_2_2_4_8_32_256_SEQUENCE.exe
1 2 2 4 8 32 256 8192 2097152
```