Laboratory Activity Questions

Task 1: Write C program for the following questions

1. Write a program to print all even numbers from 1 to 100 using for loop
2. Write a program to print all odd numbers from 1 to 100 using do-while loop. Also, find the sum of all odd numbers.
3. Write a program to count the total even and odd numbers between the user defined range (eg: 1-10). Also, find the sum of all even and odd numbers separately.
4. Write a program to find the factorial of a number.
5. Write a program to find the exponent of a number. [Consider the case when exponent is zero and base is zero]
6. Write a program to print the multiplication table of a user entered number.
7. Write a program to find the sum of first N natural number using while loop.
8. Write a program to print the series: 1/1*2/2*3/3*4/4*5/5*…….*N/N
9. Print the following pattern using any loop:

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
```

10. Print the following pattern using any loop:

```
*    *    *    *    *
*    *    *    *    *
*    *    *    *    *
*    *    *    *    *
*    *    *    *    *
```

10. Print the following pattern:

```
A
A B
A B C
A B C D
A B C D E
A B C D E F
```

11. Write a function to calculate the area and perimeter of a rectangle
12. Write a function to determine whether a number is odd or even