

### **List of C programs to practice for PCA1**

1. Write a C program to implement a basic calculator using switch-case.
2. Write a C program to check whether a year is a Leap year or not.
3. Write a C program to print all numbers within a given range which are divisible by 5 but not by 15.
4. Write a C program to count the number of digits of a number.
5. Write a C program to display the sum of digits of a number.
6. Write a C program to display the product of digits of a number.
7. Write a C program to find the reverse of a number.
8. Write a C program to calculate the factorial of a number.
9. Write a C program to check whether a number is Armstrong number or not.
10. Write a C program to check whether a number is Krishnamurthy number or not.
11. Write a C program to check whether a number is a prime number or not.
12. Write a C program to check whether a number is a palindrome number or not.
13. Write a C program to check whether a number is a prime number or not.
14. Write a C program to find the difference between a number and its reverse.
15. Write a C program to display the sum of the series:  $1-2+3-4+\dots+n$ .
16. Write a C program to display the sum of the series:  $1^2+2^2+3^2+\dots+n^2$ .
17. Write a C program to display the sum of the series:  $1!+2!+3!+\dots+n!$ .
18. Write a C program to display the following pattern:

```
1
12
123
1234
```

19. Write a C program to display the following pattern:

```
1
23
456
78910
```

20. Write a C program to display the following pattern:

```
4 3 2 1
3 2 1
2 1
1
```

21. Write a C program to display the following pattern:

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

22. Write a C program to display the following pattern:

```
1  
1 0  
1 0 1  
1 0 1 0
```