Programs for PPS Lab (Section B & D)

1. Write a program (WAP) to perform addition, multiplication, division and subtraction between two numbers.
2. WAP to calculate area of circle.
3. WAP to calculate circumference of a circle.
4. WAP to calculate area of a rectangle.
5. WAP that accepts the marks of 5 subjects and finds the sum and percentage marks obtained by the student.
6. WAP that calculates the Simple Interest and Compound Interest. The Principal, Amount, Rate of Interest and Time are entered through the keyboard.
   Compound interest=P(1+(R/100))^T-P
7. WAP that accepts the temperature in Centigrade and converts into Fahrenheit.
8. WAP that swaps values of two variables using a third variable.
9. WAP that swaps values of two variables without using a third variable.
10. WAP to find the greatest among two numbers using conditional operator.
11. WAP to find the greatest among three numbers using conditional operator.
12. WAP to evaluate the expression a-- + b++ - ++c.
13. WAP to find the size of operator.
14. WAP to check whether the value of a number is greater than zero or not if yes then increment the value by 1.
15. WAP to determine whether a person is eligible to vote or not.
16. WAP to find whether the given number is even or odd.
17. WAP that checks whether the two numbers entered by the user are equal or not.
18. WAP to find greatest of three numbers using if-else.
19. WAP that tells whether a given year is a leap year or not.
20. WAP to evaluate the expression
    i) 3*4+5*6
    ii) 3*4%(5/2)
    iii) x * 5 && 5 || (b / c)
    iv) (x > y) + !a || c++
21. WAP to enter any character. If the entered character is in lower case, then convert in upper case and if it is in lower case then convert it into upper case.
22. WAP to print the ASCII value of a character.
23. WAP to calculate the area of a triangle using Heron's formula.
24. WAP to find whether a number is greater or equal to another number using if-else-if.
25. WAP to test whether a number entered is positive, negative or equal to zero.
26. WAP to calculate the roots of a quadratic equation.
27. WAP that accepts marks of five subjects and finds percentage and prints grades according to the following criteria:
    i) Between 90-100%----- Print'A'
    ii) 80-90%----------Print'B'
    iii) 60-80%----------Print'C'
    iv) Below 60% ---------- Print'D'

28. WAP to print day of week name using switch case.
29. WAP to print total number of days in a month using switch case.
30. WAP to check whether an alphabet is vowel or consonant using switch case.
31. WAP to find maximum between two numbers using switch case.
32. WAP to check whether a number is even or odd using switch case.
33. WAP to check whether a number is positive, negative or zero using switch case.
34. WAP that takes two operands and one operator from the user and perform the operation and prints the result by using switch statement (Simple Calculator).
35. WAP to print only 1 to 10 numbers using while loop.
36. WAP to print even numbers from 1 to 10 using while loop.
37. WAP to calculate the sum of first 10 numbers using while loop.
38. WAP to print 20 horizontal asterisks (*) using while loop.
39. WAP to print sum of all numbers up to a given number. (from m to n) using while loop.
40. WAP to print numbers from 1 to 10 using do-while loop.
41. WAP to calculate the average of first n numbers using do-while loop.
42. WAP to display the square and cube of first n natural numbers using do-while loop.
43. WAP to list all the leap years from 1900 to 2100 using do-while loop.
44. Program to add n numbers until the condition is false using do-while loop.
45. Program to print table for the given number using do-while loop.
46. WAP to sum of digits in a given number.
47. WAP to find Factorial of a number.
48. WAP to print the Fibonacci Series.
49. WAP to find whether a number is a palindrome number or not.
50. WAP to check whether the entered number is prime or not.
51. WAP to print strong numbers in the given range.
52. WAP to print Armstrong number.
53. WAP to find the reverse of a number.
54. WAP to print a pattern:

    *****
    *****
    *****
    *****
    *****
55. WAP to print a pattern:

    1 1 1 1 1
    2 2 2 2 2
    3 3 3 3 3
    4 4 4 4 4
    5 5 5 5 5

56. WAP to print a pattern:

```
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
```

57. WAP to print a pattern:

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

58. WAP to print a pattern:

```
A
AB
ABC
ABCD
ABCDE
```

59. WAP to print a pattern:

```
ABCDE
ABCD
ABC
AB
A
```

60. WAP to print a pattern:

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

61. WAP to print a pattern:

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

62. WAP to print a pattern:

```
A
BB
CCC
DDDD
EEEEE
```

63. WAP to print a pattern:

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

64. WAP to print a pattern:

```
    A
   BB
  CCC
 DDDD
EEEEE
```

65. WAP to print a pattern:

```
----*
---**
--***
-****
*****
```

66. WAP to print a pattern:

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

67. WAP to print a pattern:

```
5
4 4
3 3 3
2 2 2 2
1 1 1 1 1
```

68. WAP to print a pattern:

```
5
5 4
5 4 3
5 4 3 2
5 4 3 2 1
```

69. WAP to print a pattern:

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

70. WAP to print a pattern:
    1
    2 1
    3 2 1
    4 3 2 1
    5 4 3 2 1
71. WAP to print a pattern:
    1 1 1 1 1
    2 2 2 2
    3 3 3
    4 4
    5
72. WAP to print a pattern:
    1 2 3 4 5
    2 3 4 5
    3 4 5
    4 5
    5
73. WAP to print a pattern:
    5 5 5 5 5
    4 4 4 4
    3 3 3
    2 2
    1
74. WAP to print a pattern:
    5 4 3 2 1
    4 3 2 1
    3 2 1
    2 1
    1
75. WAP to print a pattern:
    5 4 3 2 1
    5 4 3 2
    5 4 3
    5 4
    5
76. WAP to print a pattern:
    1 2 3 4 5
    1 2 3 4
    1 2 3
    1 2
    1

77. WAP to print a pattern:
    1
    2 3
    4 5 6
    7 8 9 10
78. WAP to print a pattern:
    10
    9 8
    7 6 5
    4 3 2 1