CONDITIONAL CONSTRUCTS

Using IF and Its FAMILY

1. WAP to find the max of two numbers
2. WAP to print the grade for a given percentage
3. WAP to find the greatest of given 3 numbers
4. WAP to check whether character is
   - Upper case
   - Lower case
   - Digit
   - No of the above
5. WAP to find the middle number (by value) of given 3 Numbers

Using Switch-case

6. W.A.P to check whether character is
   - Upper case
   - Lower case
   - Digit
   - None of the above
7. W.A.P for simple calculator

Using Loops

8. W.A.P to print the power of two series using for loop
   2^1, 2^2, 2^3, 2^4, 2^5 ...
9. W.A.P to print the power of N series using Loops
   N^1, N^2, N^3, N^4, N^5 ...
10. W.A.P to multiply 2 nos without multiplication operator
11. W.A.P to check whether a number is palindrome or not
12. WAP to print line pattern

-Read total (n) number of pattern chars in a line (number should be **"**odd**"**)

-Read number (m) of pattern char to be printed in the middle of line (**"**odd**"** number)

-Print the line with two different pattern chars

-Example - Let's say two types of pattern chars '$' and '*' to be printed in a line. Total number of chars to be printed in a line are 9. Three '*' to be printed in middle of line. Output ==> $$$*******$$$

13. Based on previous example print following pyramid

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

14. Print rhombus using for loops

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

Bit-wise Operators

15. W.A.P to count set bits in a given number
16. W.A.P to print bits of given number
17. W.A.P to swap nibbles of given number

Arrays

18. W.A.P to find the average of elements stored in a array.

– Read value of elements from user

– For given set of values : { 13, 5, -1, 8, 17 }

– Average Result = 8.4

19. W.A.P to find the largest array element

– Example 100 is the largest in {5, 100, -2, 75, 42}

20. W.A.P to compare two arrays (element by element).

– Take equal size arrays

– Arrays shall have unique values stored in random order

– Array elements shall be entered by user

– Arrays are compared “EQUAL” if there is one to one mapping of array elements value

– Print final result “EQUAL” or “NOT EQUAL”

Example of Equal Arrays :

– A[3] = {2, -50, 17}

– B[3] = {17, 2, -50}