**LAB ASSIGNMENT (Looping Construct)**

* WAP to find factorial of a given number.
* WAP to find the sum of all the digits of a given number.
* WAP to check a given number is palindrome or not. ( If reverse of a number and number is same, then it is called palindrome).
* WAP to check a given number is prime number or not.
* WAP to find y to the power of x .
* WAP to check a given number is Armstrong or not.

( A positive integer of n digits is called Armstrong number of order n if xyz.. = pow(x ,n)+pow(y ,n)+pow(z ,n)+….

Ex. 153 = 13+53+33 . )

* WAP to print the following pattern:
  1. 3 5 7 9 …….till 100
* WAP to print the following pattern
  1. 3 7 13 21… till 100
* WAP to print all prime number between 2 to 20.
* WAP to print Fibonacci series.

0 1 1 2 3 5 8 13 … till 100

* WAP to program to print following patterns:

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| * **\* \* \* \*** * \* \* \* * \* \* * \*   \* | 1  1 2  1 2 3  1 2 3 4  1 2 3 4 5 | 5 4 3 2 1  5 4 3 2  5 4 3  5 4  5 |
| A  A B  A B C  A B C D  A B C D E | A B C D E  A B C D  A B C  A B  A | \*   * \* \* * \* \* \* \* * \* \* \* \* \*\* * \* \* \* \* \*\* \* \* |