

List of Programming Problems:

1. Write a program to add n numbers taken from the user (without using an array or using an array).
2. Write a program to show the average of n numbers.
3. Write a program to generate Fibonacci series up to n^{th} term.
4. Write a program to calculate the sum of the terms in a Fibonacci series up to n^{th} term
5. Write a program to print the following triangle:

```
#  
##  
###  
####  
#####
```

6. Program to find the maximum/minimum of n numbers (with or without using array).
7. Program to find the factorial of a given number.
8. Program to find the GCD of two numbers X and Y given by user
9. Program to find the b^p of two numbers 'b' and 'p' given by user
10. Write binary search program for a given sorted array.

Note: all the numbers can be 8bits or 16 bits.

Problem-01: Write a program to add n numbers taken from the user (without using an array or using an array).

Solution: Here the input output sample

Input: Number of Inputs: 12

Enter Number:

23

45

10

8

6

9

200

111

1234

45

0

23

Output: Results: 1714

Problem-02: Write a program to show the average of n numbers.

Solution: Here the input output sample

Input: Number of Inputs: 8

Enter Number:

12

23

34

45

56

67

78

89

Output: Average: 50

Problem-03: Write a program to generate Fibonacci series up to n^{th} term.

Solution: Here the input output sample

Input: Enter the Length: 15

Output: Fibonacci Series: 0 1 1 2 3 5 8 13 21 34 55 89 144 233 377

Problem-04: Write a program to calculate the sum of the terms in a Fibonacci series up to n^{th} term

Solution: Here the input output sample

Input: Enter the Length: 12

Output: Sum of Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, is 232

Problem-05: Write a program to print the following triangle:

```
#  
##  
###  
####  
#####
```

Solution: Here the input output sample

Input: Enter the Front for Triangle: @

Output: The Required Triangle:

```
@  
@ @  
@ @ @  
@ @ @ @  
@ @ @ @ @  
@ @ @ @ @ @  
@ @ @ @ @ @ @  
@ @ @ @ @ @ @ @  
@ @ @ @ @ @ @ @ @
```

Problem-06: Program to find the maximum/minimum of n numbers (with or without using array).

Solution: Here the input output sample

Input: Number of Inputs: 10

Enter Number:

12

23

34

45

56

67

78

89

456

12

Output: Maximum: 456

Minimum: 12

Problem-07: Program to find the factorial of a given number.

Solution: Here the input output sample

Input: Enter the Number to find Factorial: 5

Output: Factorial of this Number is: 120

Problem-08: Program to find the GCD of two numbers X and Y given by user

Solution: Here the input output sample

Input: Enter two numbers:

First Number: 12

Second Number: 4

Output: GCD of these Number: 4

Problem-09: Program to find the b^p of two numbers 'b' and 'p' given by user

Solution: Here the input output sample

Input: Enter two numbers:
Enter Base: 7
Enter Power: 3

Output: GCD of these Number: 343

Problem-10: Write binary search program for a given sorted array.

Solution: Here the input output sample (There is some data in array in main code)

Input: Enter Number: 10

Output: Found!