1. Write a program to calculate Prime factors of a number.

**Sample Input**

Enter the number:15

**Sample Output**

3 5

1. Write a program to calculate Multiplication table.

**Sample Input**

Enter the multiplication number: 5

**Sample Output**

5 X 1 = 5

5 X 2 = 10

5 X 3 = 15

5 X 4 = 20

5 X 5 = 25

5 X 6 = 30

5 X 7 = 35

5 X 8 = 40

5 X 9 = 45

5 X 10 = 50

1. Write a program to calculate Factorial of a number

**Sample Input**

Enter the number: 5

**Sample Output**

120

1. Write a program to calculate Fibonacci series.

**Sample Output**

0 1 1 2 3 5 8 13

1. Write a program to calculate Sum of the series 1+2+3+---------+n.

**Sample Input**

Enter the value of n: 4

**Sample Output**

10

1. Write a program to calculate Sum of squares of the series 12+22+32+--------+n2.

**Sample Input**

Enter the value of n: 4

**Sample Output**

30

Hint: 1 + 4 + 9 + 16 = 30

1. Write a program to find the sum of factorial of a given series 1! + 2! + 3! + ----- + n!.

**Sample Input**

Enter a number: 5

**Sample Output**

153

Hint: 1 + 2 + 6 + 24 + 120 = 153

1. Write a program to find the Non-Fibonacci series i.e. the number that does not come in Fibonacci series.

**Sample Input**

Enter a number: 20

**Sample Output**

4 6 7 9 10 11 12 14 15 16 17 18 19 20

Hint: A Fibonacci series is 0 1 1 2 3 5 8 13 21

A Non-Fibonacci series is 4 6 7 9 10 11 12 14 15 16 17 18 19 20

1. Write a program to check whether a number is Perfect number or not. If true print “Yes, it is a perfect number” or “Not”

**Sample Input**

Enter a number: 28

**Sample Output**

Yes, it is a perfect number.

Hint: The sum of its proper divisors. Let a number is 6, its divisors are 1,2,3. Sum of these divisors are 1+2+3 = 6. If the number and the sum of divisor is same then it is a perfect number.

1. Write a program to print all Perfect numbers between 1 to n.

**Sample Input**

Enter a number: 100

**Sample Output**

6 28

1. Write a program to find frequency of each digit in a given integer. Hint: Given a number N and a digit D. Your work is to find how many times the digit D appears in the number N.

**Sample Input**

Enter a number: 2223322

Enter a number to count: 2

**Sample Output**

5

1. Write a program to enter a number and print it in words.

**Sample Input**

Enter a number: 3

**Sample Output**

THREE

1. Write a program to print all ASCII character with their values from a range.

**Sample Input**

Enter a number: 2223322

Enter a number to count: 2

**Sample Output**

5

1. Write a program to find power of a number.

**Sample Input**

Enter a number: 3

Enter the power: 2

**Sample Output**

9

1. Write a program to find square root of a number.

**Sample Input**

Enter a number: 36

**Sample Output**

6

1. Write a program to find one's complement of a binary number.

**Sample Input**

Enter a binary number: 1010

**Sample Output**

The 1’s complement of 1010 is: 0101

1. Write a program to find two's complement of a binary number.

**Sample Input**

Enter a binary number: 1100

**Sample Output**

4

Hint: First convert to 1’s complement, add 1 to it.

1. Write a program to convert Binary to Octal number system.

**Sample Input**

Enter a Binary number: 1100

**Sample Output**

14

1. Write a program to convert Binary to Decimal number system.

**Sample Input**

Enter a Binary number: 1100

**Sample Output**

12

1. Write a program to convert Binary to Hexadecimal number system.

**Sample Input**

Enter a Binary number: 1100

**Sample Output**

C

1. Write a program to convert Octal to Binary number system.

**Sample Input**

Enter a Octal number: 12

**Sample Output**

1010

1. Write a program to convert Octal to Decimal number system.

**Sample Input**

Enter a Octal number: 12

**Sample Output**

10

1. Write a program to convert Octal to Hexadecimal number system.

**Sample Input**

Enter a Octal number: 12

**Sample Output**

A

1. Write a program to convert Decimal to Binary number system.

**Sample Input**

Enter a Decimal number: 12

**Sample Output**

1100

1. Write a program to convert Decimal to Octal number system.

**Sample Input**

Enter a Decimal number: 12

**Sample Output**

14

1. Write a program to convert Decimal to Hexadecimal number system.

**Sample Input**

Enter a Decimal number: 12

**Sample Output**

C

1. Write a program to convert Hexadecimal to Binary number system.

**Sample Input**

Enter a Hexadecimal number: E

**Sample Output**

1110

1. Write a program to convert Hexadecimal to Octal number system.

**Sample Input**

Enter a Hexadecimal number: E

**Sample Output**

16

1. Write a program to convert Hexadecimal to Decimal number system.

**Sample Input**

Enter a Hexadecimal number: E

**Sample Output**

14