

Medium Problems:

1. Write a C# program to input basic salary of an employee and calculate his annual Gross salary and take home salary according to following:

Basic Salary \leq 10000 : HRA = 20%, DA = 80%

Basic Salary \leq 20000 : HRA = 25%, DA = 90%

Basic Salary $>$ 20000 : HRA = 30%, DA = 95%

Deductions Taxes : 6% per annum. Insurance : 1% per annum.

2. Write a program to display the first n terms of Fibonacci series.

Test Data :

Input number of terms to display : 10

Expected Output :

Here is the Fibonacci series up to 10 terms :

0 1 1 2 3 5 8 13 21 34

3. Write a C# program to check whether a number is palindrome or not.

Input: Input any number: 121

Output: 121 is palindrome

4. Write a C# program to print all Armstrong numbers between 1 to n.

Input: Enter lower limit: 1

Enter upper limit: 1000

Output:

Armstrong number between 1 to 1000 are:

1, 2, 3, 4, 5, 6, 7, 8, 9, 153, 370, 371, 407.

5. C# program to print all leap years from 1 to N.

Enter the value of N: 2000

Leap years from 1 to 2000:

128 132 136 140 144 148 152 156 160 164 168 172 176 180
184 188 192 196 204 208...

6. Write a C# program to add two 3* 3 Matrix.
7. Write a program to find sum of Arithmetic Progression series.
Input : starting number = 5, difference = 2,
number of elements = 10

Output Series: 5 7 9 11 13 15 17 19 21 23

Sum is Output:140

8. Find the number in string and form as a number and find whether it is odd or even.

a. Input: "Ra12fla4mg32".

b. Answer : 12432 is Even number.

9. Draw the following pattern in console:

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

10. Draw the following hallow rectangle in console:

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