OOP Lab2

NB: The user screen must be organized and the names of the variables must have meaning and use the comments to clarify the meaning of the written code and use Regens. The user must be asked if he wants to execute the program again or not before ending the program. All values received from user .

1. Write a C# Sharp program to compute the sum of the two given integer values. If the two values are the same, then return triple their sum.

Sample Input:
1, 2
3, 2
2, 2
Expected Output:

```
3
5
12
```

2. Write a C# Sharp program to get the absolute difference between n and 51. If n is greater than 51 return triple the absolute difference.

Sample Input:
53
30
51
Expected Output:

```
6
21
0
```

3. Write a C# Sharp program to check two given integers, and return true if one of them is 30 or if their sum is 30.

Sample Input:
30, 0
25, 5
20, 30
20, 25
Expected Output:

```
True
True
True
False
```

4. Write a C# Sharp program to check if a given positive number is a multiple of 3 or a multiple of 7.

Sample Input:

3

14

12

37

Expected Output:

```
True
True
True
False
```

5- Write a C# Sharp program to check two given integers whether either of them is in the range 100..200 inclusive.

Sample Input:

100, 199

250, 300

105, 190

Expected Output:

```
True
False
True
```

6. Write a C# Sharp program to check whether three given integer values are in the range 20..50 inclusive. Return true if 1 or more of them are in the said range otherwise false.

Sample Input:

11, 20, 12

30, 30, 17

25, 35, 50

15, 12, 8

Expected Output:

```
True
True
True
False
```

7- Write a C# Sharp program to check the largest number among three given integers.

Sample Input:
1,2,3
1,3,2
1,1,1
1,2,2
Expected Output:

```
3
3
1
2
```

8-Write a C# Sharp program to check which number nearest to the value 100 among two given integers. Return 0 if the two numbers are equal.

Sample Input:
78, 95
95, 95
99, 70
Expected Output:

```
95
0
99
```

9-Write a C# Sharp program to check whether two given integers are in the range 40..50 inclusive, or they are both in the range 50..60 inclusive.

Sample Input:
78, 95
25, 35
40, 50
55, 60
Expected Output:

```
False
False
True
True
```

10-Write a C# Sharp program to find the larger value from two positive integer values that is in the range 20..30 inclusive, or return 0 if neither is in that range.

Sample Input:
78, 95
20, 30
21, 25
28, 28
Expected Output:

```
0
30
25
28
```

11-Write a C# Sharp program to create a new string which is n (non-negative integer) copies of a given string.

Sample Input:
"JS", 2
"JS", 3
"JS", 1
Expected Output:

```
JSJS
JSJSJS
JS
```

12-Write a C# Sharp program that accept two integers and return true if either one is 5 or their sum or difference is 5.

Sample Input:
5, 4
4, 3
1, 4
Expected Output:

```
True
False
True
```

13- Write a C# Sharp program to check if a given non-negative given number is a multiple of 3 or 7, but not both.

Sample Input:
3
7
21
Expected Output:

```
True
True
False
```

14- Write a C# Sharp program to check whether a given number is divisible by 3 return "Fizz" and return "Buzz" if it divisible by 5 and return "FizzBuzz" If it divisible by 3 and 5

Sample Input:
9
10
15
20
Expected Output:

```
Fizz
Buzz
FizzBuzz
Buzz
```

15- Write a C# Sharp program to check if it is possible to add two integers to get the third integer from three given integers.

Sample Input:
1, 2, 3
4, 5, 6
-1, 1, 0
Expected Output:

```
True
False
True
```

16- Write a C# Sharp program to check if y is greater than x, and z is greater than y from three given integers x,y,z.

Sample Input:
1, 2, 3
4, 5, 6
-1, 1, 0
Expected Output:

```
True
True
False
```

17- Create Multiplication Table

Expected Output :

1*1=1 | 1*2=2 | 1*3=3 | 1*4 = 4 …..

2*1=2 | 2*2=4 | 2*3 = 6 …..

18- receive 3 positive numbers from user and display max and min of them

Expected Output :

Fn=10

Sn=20

Tn=15

Max=20 , Min = 10

19- receive positive numbers from user until summation of them reached or exceed 400

20 – display Selection Menu for user

Expected Output:

+) summation (Will Receive two numbers and display summation)

-) Subtraction (will receive two numbers and display subtraction)

/) division (receive two numbers and the second number shouldn't be zero)

***) multiplication** (receive two numbers neither of them is zero)

e) Exit

Please enter your operation + , - , * Or /

After displaying the result for selected operation , ask user to repeat this operation and don't close the application until user enter e for exit

21- receive two different positive numbers and display even , odd numbers between them , then display summation of odd ones and even ones , then display absolute difference between two summations .

Expected Output :

FN:1

SN:10

Even : 2,4,6,8,10

Sum of Even = 30

ODD:1,3,5,7,9

Sum OF odd = 25

EvenSummation – OddSummation = 30 – 25 = 5