Some Practice Problems

on

conditional statements(if, else if, switch)

Problem 1

Description: Write a C program to take an integer number(x) as input and print “Non-negative” if x>=0. Otherwise print “Negative” without quotation.

Sample Input:
100000

Sample Output:
Non-negative

Sample Input:
-521

Sample Output:
Negative

Problem 2

Description: Write a C program to take an integer number(x) as input. Print “Positive” if x>0. If x<0 then print “Negative”. Otherwise print “Zero”.
[N. B. Do not print the quotation.]

Sample Input:
100

Sample Output:
Positive

Sample Input:
0

Sample Output:
Zero

Problem 3

Description: Write a C program to take two integer number (x and y) as input and display the bigger one.

Sample Input:
100 125

Sample Output:
125

Sample Input:
390 299

Sample Output:
390

Problem 4

Description: Write a C program that takes an integer number(x) as input and determines whether the number is odd or even.
For more clarification, check sample input/output.

Sample Input:
10

Sample Output:
Even

Sample Input:
5

Sample Output:
Odd

Problem 5

Description: Write a C program that takes an integer number(x) as input and checks whether the number is a square number or not.
For more clarification, check sample input/output.

Sample Input:
25

Sample Output:
Yes

Sample Input:
12

Sample Output:
No

Problem 6.1

Description: Write a C program that takes a character as input and determines whether it is a vowel or consonant.
For more clarification, check sample input/output.

Sample Input:
a

Sample Output:
Vowel

Sample Input:
y

Sample Output:
Consonant

Problem 6.2

Description: Write a C program that takes a character as input and determines whether it is a vowel or consonant or other symbols.
For more clarification, check sample input/output.

Sample Input:	Sample Input:	Sample Input:	Sample Input:
a	y	8	+
Sample Output:	Sample Output:	Sample Output:	Sample Output:
Vowel	Consonant	Others	Others

Problem 7

Description: Write a C program to take three integer numbers (x, y and z) as input and display the smallest one.
For more clarification, check sample input/output.

Sample Input:
10 25 8

Sample Output:
8

Sample Input:
10 -1 44

Sample Output:
-1

Problem 8

Description: Write a C program to take three integer numbers (x, y and z) as input and display the medium one.
For more clarification, check sample input/output.

Sample Input:
36 11 25

Sample Output:
25

Sample Input:
12 5 60

Sample Output:
12

Problem 9

Description: Given the value of three edges(a, b and c), determine whether they can form a triangle or not.
For more clarification, check sample input/output.

Sample Input:
10 3 2

Sample Output:
Not a triangle

Sample Input:
3 4 5

Sample Output:
Triangle

Problem 10

Description: Given the value of three edges(a, b and c) of a triangle, determine whether the triangle is right angled or not.
For more clarification, check sample input/output.

Sample Input:
10 3 2

Sample Output:
Not a triangle

Sample Input:
3 4 5

Sample Output:
Right angled triangle

Sample Input:
5 5 6

Sample Output:
Triangle

Problem 11

Description: Given a year as input, determine whether the year is leap year or not.
For more clarification, check sample input/output.

Sample Input:
2020

Sample Output:
Leap Year

Sample Input:
2021

Sample Output:
Not a Leap Year

❖ **To determine whether a year is a leap year, follow these steps:**

1. If the year is evenly divisible by 4, go to step 2. Otherwise, go to step 5.
2. If the year is evenly divisible by 100, go to step 3. Otherwise, go to step 4.
3. If the year is evenly divisible by 400, go to step 4. Otherwise, go to step 5.
4. The year is a leap year (it has 366 days).
5. The year is not a leap year (it has 365 days).

Problem 12

Description: Given a character as input, identify the character as alphabet, number or others.
For more clarification, check sample input/output.

Sample Input:	Sample Input:	Sample Input:
G	3	$
Sample Output:	**Sample Output:**	**Sample Output:**
Alphabet	Number	Others

Problem 13

Description: Given an integer n as input, calculate the sum up to n-th natural number. (e.g. 1+2+3+ … … … +n)

Here 1<= x <= 100000

For more clarification, check sample input/output.

Sample Input:	Sample Input:	Sample Input:
1	5	100000
Sample Output:	**Sample Output:**	**Sample Output:**
1	15	5000050000

Problem 14

Description: Given an integer number as input, print the number of total even numbers in between 0 to n (inclusive).
Here, $1 <= n <= 10^9$
[N. B. For more clarification, check sample input/output.]

Sample Input:
10

Sample Output:
5

Sample Input:
19

Sample Output:
9

Problem 14

Description: Given an integer value(n) as input, print the number of total even numbers in between -n to n (inclusive).
Here, $-10^4 <= n <= 10^4$
[N. B. For more clarification, check sample input/output.]

Sample Input:	Sample Input:	Sample Input:
10	19	20
Sample Output:	**Sample Output:**	**Sample Output:**
11	19	21

Explanation: In between -10 and 10 there are total 11 even numbers. They are -10, -8, -6, -4, -2, 0, 2, 4, 6, 8, 10

Problem 15

Description: Given an integer number as input, print the number of total odd numbers in between 0 to n (inclusive).
Here, $1 <= n <= 10^9$
[N. B. For more clarification, check sample input/output.]

Sample Input:
10

Sample Output:
5

Sample Input:
19

Sample Output:
10

Thank You

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