

# Cyber Security Center

## Logic Development Program

### C# If Else Problems

1. Write a C# Sharp program to accept two integers and check whether they are equal or not.  
*Test Data :*  
Input 1st number: 5  
Input 2nd number: 5  
*Expected Output :*  
5 and 5 are equal
2. Write a C# Sharp program to check whether a given number is even or odd.  
*Test Data :* 15  
*Expected Output :*  
15 is an odd integer
3. Write a C# Sharp program to check whether a given number is positive or negative.  
*Test Data :* 14  
*Expected Output :*  
14 is a positive number
4. Write a C# Sharp program to find whether a given year is a leap year or not.  
*Test Data :* 2016  
*Expected Output :*  
2016 is a leap year
5. Write a C# Sharp program to read the age of a candidate and determine whether it is eligible for casting his/her own vote.  
*Test Data :* 21  
*Expected Output:*  
Congratulation! You are eligible for casting your vote.
6. Write a C# Sharp program to read the value of an integer m and display the value of n is 1 when m is larger than 0, 0 when m is 0 and -1 when m is less than 0.  
*Test Data :* -5  
*Expected Output:*  
The value of n = -1

7. Write a C# Sharp program to accept the height of a person in centimeter and categorize the person according to their height.  
Test Data : 135  
*Expected Output :*  
The person is Dwarf.
8. Write a C# Sharp program to find the largest of three numbers.  
Test Data :  
Input the 1st number :25  
Input the 2nd number :63  
Input the 3rd number :10  
*Expected Output :*  
The 2nd Number is the greatest among three
9. Write a C# Sharp program to accept a coordinate point in an XY coordinate system and determine in which quadrant the coordinate point lies.  
Test Data :  
Input the value for X coordinate :7  
Input the value for Y coordinate :9  
*Expected Output :*  
The coordinate point (7,9) lies in the First quadrant.
10. Write a C# Sharp program to find the eligibility of admission for a professional course based on the following criteria:  
Marks in Maths  $\geq 65$   
Marks in Phy  $\geq 55$   
Marks in Chem  $\geq 50$   
Total in all three subject  $\geq 180$   
or  
Total in Math and Subjects  $\geq 140$   
  
Test Data :  
Input the marks obtained in Physics :65  
Input the marks obtained in Chemistry :51  
Input the marks obtained in Mathematics :72  
*Expected Output :*  
The candidate is eligible for admission.
11. Write a C# Sharp program to calculate root of Quadratic Equation.  
Test Data :

Input the value of a : 1  
Input the value of b : 5  
Input the value of c : 7

*Expected Output :*

Root are imaginary;  
No Solution.

12. Write a C# Sharp program to read roll no, name and marks of three subjects and calculate the total, percentage and division.

Test Data :

Input the Roll Number of the student :784

Input the Name of the Student :James

Input the marks of Physics, Chemistry and Computer Application : 70 80 90

*Expected Output :*

Roll No : 784

Name of Student : James

Marks in Physics : 70

Marks in Chemistry : 80

Marks in Computer Application : 90

Total Marks = 240

Percentage = 80.00

Division = First

13. Write a C# Sharp program to read temperature in centigrade and display a suitable message according to temperature state below :

Temp < 0 then Freezing weather

Temp 0-10 then Very Cold weather

Temp 10-20 then Cold weather

Temp 20-30 then Normal in Temp

Temp 30-40 then Its Hot

Temp >=40 then Its Very Hot

Test Data :

42

*Expected Output :*

Its very hot.

14. Write a C# Sharp program to check whether a triangle is Equilateral, Isosceles or Scalene.

Test Data :

50 50 60

*Expected Output :*

This is an isosceles triangle.

15. Write a C# Sharp program to check whether a triangle can be formed by the given value for the angles.

Test Data :

40 55 65

*Expected Output :*

The triangle is not valid.

16. Write a C# Sharp program to check whether an alphabet is a vowel or consonant.

Test Data :

k

*Expected Output :*

The alphabet is a consonant.

17. Write a C# Sharp program to calculate profit and loss on a transaction.

Test Data:

500 700

*Expected Output :*

You can book your profit amount : 200

18. Write a program in C# Sharp to calculate and print the Electricity bill of a given customer. The customer id., name and unit consumed by the user should be taken from the keyboard and display the total amount to pay to the customer. The charge are as follow:

| Unit                            | Charge/unit |
|---------------------------------|-------------|
| upto 199                        | @ 1.20      |
| 200 and above but less than 400 | @ 1.50      |
| 400 and above but less than 600 | @ 1.80      |
| 600 and above                   | @ 2.00      |

If bill exceeds Rs. 400 then a surcharge of 15% will be charged and the minimum bill should be of Rs. 100/-

Test Data :

1001

James

800

*Expected Output :*

Customer IDNO :1001

Customer Name :James

unit Consumed :800

Amount Charges @Rs. 2.00 per unit : 1600.00

Surcharge Amount : 240.00

Net Amount Paid By the Customer : 1840.00

19. Write a program in C# Sharp to accept a grade and declare the equivalent description :

| Grade | Description |
|-------|-------------|
| E     | Excellent   |
| V     | Very Good   |
| G     | Good        |
| A     | Average     |
| F     | Fail        |

Test Data :

Input the grade :a

*Expected Output :*

You have chosen : Average

20. Write a program in C# Sharp to read any day number in integer and display day name in the word.

Test Data :

4

*Expected Output :*

Thursday

21. Write a program in C# Sharp to read any digit, display in the word.

Test Data :

4

*Expected Output :*

Four

22. Write a program in C# Sharp to read any Month Number in integer and display Month name in the word.

Test Data :

4

*Expected Output:*

April

23. Write a program in C# Sharp to read any Month Number in integer and display the number of days for this month.

Test Data :

7

*Expected Output:*

Month have 31 days

24. Write a program in C# Sharp which is a Menu-Driven Program to compute the area of the various geometrical shape.

Test Data :

Input your choice : 1

Input radius of the circle : 5

*Expected Output :*

The area is : 78.500000

25. Write a program in C# Sharp which is a Menu-Driven Program to perform a simple calculation.

*Test Date and Expected Output*

Enter the first Integer :10

Enter the second Integer :2

Here are the options :

1-Addition.

2-Substraction.

3-Multiplication.

4-Division.

5-Exit.

Input your choice :3

The Multiplication of 10 and 2 is: 20