

## **C++ Programming Exercises (if...else & switch...case)**

1. Write a C++ program to accept two integers and check whether they are equal or not.

Test Data : 15 15

Expected Output :

Number1 and Number2 are equal

2. Write a C++ 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++ program to check whether a given number is positive or negative.

Test Data : 15

Expected Output :

15 is a positive number

4. Write a C++ 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++ program to read the age of a candidate and determine whether he is eligible to cast his/her own vote.

Test Data : 21

Expected Output :

Congratulation! You are eligible for casting your vote.

6. Write a C++ program to find the largest of three numbers.

Test Data : 12 25 52

Expected Output :

1st Number = 12,      2nd Number = 25,      3rd Number = 52

The 3rd Number is the greatest among three

7. Write a C++ program to determine eligibility for admission to a professional course based on the following criteria: Go to the editor

Eligibility Criteria : Marks in Maths  $\geq 65$  and Marks in Phy  $\geq 55$  and Marks in Chem  $\geq 50$  and Total in all three subject  $\geq 190$  or Total in Maths and Physics  $\geq 140$  ----- Input the marks obtained in Physics :65 Input the marks obtained in Chemistry :51 Input the marks obtained in Mathematics :72 Total marks of Maths, Physics and Chemistry : 188 Total marks of Maths and Physics : 137 The candidate is not eligible.

Expected Output :

The candidate is not eligible for admission.

8. Write a C++ program to read the 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

9. Write a C++ program to read temperature in centigrade and display a suitable message according to the 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.

10. Write a C++ program to check whether a character is an alphabet, digit or special character.

Test Data :

@

Expected Output :

This is a special character.

11. Write a C++ program to check whether an alphabet is a vowel or a consonant.

Test Data :

k

Expected Output :

The alphabet is a consonant.

12. Write a program in C++ to calculate and print the electricity bill of a given customer. The customer ID, name, and unit consumed by the user should be captured from the keyboard to display the total amount to be paid to the customer.

The charge are as follow :

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

13. Write a program in C++ to accept a grade and declare the equivalent description :

GradeDescription

E Excellent

V Very Good

G Good

A Average

F      Fail

Test Data :

Input the grade :A

Expected Output :

You have chosen : Average

14. Write a C++ program to read any day number in integer and display the day name in word format.

Test Data :

4

Expected Output :

Thursday

15. Write a C++ program for reading any Month Number and displaying the Month name as a word.

Test Data :

4

Expected Output :

April

16. Write a program in C++ 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

17. Write a program in C++ which is a Menu-Driven Program to perform a simple calculation of addition, subtraction, multiplication, division. (calculator project)