



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

EST 102 Programming in C
Conditional Statement – Practice Questions

- 2.1 Write a C program, which takes two integer operands and one operator from the user, performs the operation and then prints the result. (Consider the operators +, -, *, /, % and use Switch Statement)
- 2.2 Write a C Program to find the roots of a Quadratic Equation.
- 2.3 Write a C 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.
- 2.4 If cost price and selling price of an item are input through the keyboard, write a program to determine whether the seller has made profit or incurred loss. Also determine how much profit he made or loss he incurred.
- 2.5 Write a C program to find the eligibility of admission for a professional course based on the following criteria:
Eligibility Criteria: Marks in Maths ≥ 65 and Marks in Physics ≥ 55 and Marks in Chemistry ≥ 50 and Total in all three subject ≥ 190 or Total in Maths and Physics ≥ 140
- 2.6 Any integer is input through the keyboard. Write a program to find out whether it is an odd number or even number.
- 2.7 Write a C program to read roll no, name and marks of three subjects and calculate the total, percentage.
If the percentage of the marks ≥ 75 then print **First Class with Distinction**
If the percentage of the marks ≥ 60 and < 75 print **First Class**
If the percentage of the marks < 60 print **Second Class**
- 2.8 Any year is input through the keyboard. Write a program to determine whether the year is a leap year or not.
- 2.9 Write a C program to read temperature in centigrade and display a suitable message according to temperature state below
Temperature < 0 then Freezing weather



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Temperature 0-10 then Very Cold weather

Temperature 10-20 then Cold weather

Temperature 20-30 then Normal in Temp

Temperature 30-40 then Its Hot

Temperature ≥ 40 then Its Very Hot

2.10 If the ages of Ram, Shyam and Ajay are input through the keyboard, write a program to determine the youngest of the three.

2.11 Write a C program to check whether a triangle is Equilateral, Isosceles or Scalene

Hint: Equilateral triangle: All three sides are equal.

Isosceles triangle: All two sides are equal.

Scalene triangle: No sides are equal.

2.12 Write a program to check whether a triangle is valid or not, when the three angles of the triangle are entered through the keyboard. A triangle is valid if the sum of all the three angles is equal to 180 degrees.

2.13 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 taken from the keyboard and display the total amount to pay to the customer. The charges 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/-

2.14 Write a program to find the absolute value of a number entered through the keyboard.

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

Test Data : 4

Expected Output : Thursday



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2.16 Write a program in C to read any Month in integer number and display Month name in the word.

Test Data: 4

Expected **Output:** April

2.17 Given the length and breadth of a rectangle, write a program to find whether the area of the rectangle is greater than its perimeter. For example, the area of the rectangle with length = 5 and breadth = 4 is greater than its perimeter.

2.18 Write a program in C to accept a grade and declare the equivalent description

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

2.19 Write a C Program to check Whether a Character is Vowel or Consonant

2.20 Given three points (x_1, y_1) , (x_2, y_2) and (x_3, y_3) , write a program to check if all the three points fall on one straight line.

Hint: We ask the user to enter all 3 points (x_1, y_1) , (x_2, y_2) and (x_3, y_3) . Next we calculate slope of (x_1, y_1) , (x_2, y_2) and (x_2, y_2) , (x_3, y_3) . If slopes of both these points are equal, then all these 3 points lie on same straight line.

