Q1

Write a C program using nested if-else to find the second largest number among three integers entered by the user.

Q2

Write a C program using nested if-else to calculate the electricity bill for a user where the cost is Rs. 5 per unit for the first 100 units, Rs. 7 per unit for the next 100 units, Rs. 10 per unit for the next 100 units, and Rs. 15 per unit for units above 300.

Q3

Write a C program using nested switch-case to create a Library Management System where the user selects whether they want to manage books or magazines, and inside each choice, they can either issue or return the item.

Q4

Write a C program using nested switch-case to simulate an Online Food Ordering System where the user first selects a category (Fast Food or Drinks) and then chooses a specific item to order.

Q5

Write a C program using nested if-else and math.h to solve a quadratic equation ax² + bx + c = 0 and print whether the roots are real and distinct, real and equal, or imaginary.

Q6

Write a C program using nested switch-case to create a Geometry Calculator where the user first selects a shape (Circle, Rectangle, Triangle) and then chooses whether to calculate its area or perimeter.

Q7

Write a C program using nested if-else to implement a Login System. The program should ask the user to enter a username and password. If the username matches "admin", check if the password matches "1234". If both are correct, print "Login Successful". Otherwise, print appropriate error messages.

Q8

Write a C program using nested decision structures and math.h to calculate the monthly installment (EMI) for a loan. The user enters loan amount, time (in years), and interest type (1 for simple interest, 2 for compound interest). For compound interest, assume interest is compounded annually. Print the EMI.

Q9

Write a C program using nested switch-case to design a University Course Registration System. The user first selects a department (1. CS, 2. EE, 3. BBA). Based on the department, display courses and let the user select one. Print the selected course name.

Q10

Write a C program where the user first enters age. Use if-else to check ticket price rules:

* If age < 12 → Child Ticket
* If age between 12 and 60 → Adult Ticket
* If age > 60 → Senior Citizen Ticket

After category is decided, use a switch-case to allow selection of Movie (1. Action, 2. Comedy, 3. Horror) and print the final ticket type + movie booked.