C Language Final Test   Total Marks: 50

Note: All inputs should be taken from the user.

Q1. Laptop Details (10 Marks)

Create a program to display the details of n Laptops with the following attributes:

- **Attributes**: `LaptopNumber` , `LaptopName` ,`LaptopOperatingSystem(Windows or Linux or Apple )`,`LaptopPrice`

Tasks:

1. Display the details of all Laptops. (5 Marks)
2. Display the Laptop details with the highest price. (5 Marks)

Q2. Array Operations for 2D Array (10 Marks)

Create a 3 x 3 matrix and perform the following operation :

Tasks:

1. Matrix Addition of 3 x 3 (5 Marks).
2. Matrix Multiplication of 3 x 3 . (5 Marks).

Q3.MENU DRIVEN (10 Marks)

Write a Menu Driven C program for the following menu : Take an integer variable n and perform the following operation.

1. Age Validation (check whether the person's age is valid for vote or not).
2. Even or odd (whether the number is even or odd).
3. +ve or -ve (whether the number is positive or negative).

Q4. Character Array (10 Marks)

Take a String From the user and perform the following operation : :

1. Convert the string into Upper Case(5 Marks) : input: abcd Output : ABCD
2. Count the total number of uppercase , lowercase , and other Characters and print the total counts(5 Marks)

Q5. Menu-Driven Program for Product Management (10 Marks)

Create a structure for **Product** with the following attributes:

- productNo
- productName
- productActualPrice
- productSellingPrice

Tasks:

1. Allow the user to enter product details.
2. Create a menu with the following options:
   - **Profit**: Calculate the profit of the product.
   - **Loss**: Calculate the loss of the product.
   - **Check Product Details**: Display all product details.
   - **Exit**: Exit the program.