Practical 8

Question 1

I. Declare an array of 5 elements which is a type of integer.
II. Declare an array of 5 elements to store a string.

Question 2

Write a program in C to store elements in an array and print it.

Insert 5 elements to an array.

Print the values.

(For integer and string)

Question 3

Write a program in C to read n number of values in an array and display it in reverse order.

Insert 5 elements to an array.

Print the values in reverse order.

(For integer and string)

Question 4

Write a program in C to find the sum of all elements of the array.

Question 5

Write a program in C to copy the elements of one array into another array.

(For integer and string)

Question 6

Write a program in C for a 2D array of size 3x3 and print the matrix.

Question 7

You are organizing a party with your friends and at the end of the party you want to calculate the total expenses and divide it among friends. Write a C program to calculate the total party expenses using arrays. You may define two arrays to represent price per unit and number of units.

Item	Price per unit	Number of units
Cake	3000	2
Soft Drinks	200	50
Water Bottles	60	100
Pizza	1500	40

Question 8

Write a program to evaluate grades of 10 students for a given subject.

You should input marks of 10 students and store them in an array.

According to the following table, evaluation should be done. Store the grades in an array and print them.

Mark Range	Grade
100-85	A
84-75	B
74-65	C
64-55	D
54-45	E
44-35	F
34-0	I

Question 9

Extend the above program to calculate the GPA. Assume you have 5 subjects as follows.

- ICT 101 1.0
- ICT 105 2.0
- PHY 201 1.5
- MAT 202 2.0
- MAT 201 1.5

Declare an array to store the amount of credits of above five subjects.

Declare a 2D array to store the marks of 10 students for above 5 subjects.

Question 10

Declare a 2D array to store grades of students for above 5 subjects using the information in question 8.

Question 11

Using the information in the following table calculate the GPA of students.

Grade	Credit
A	**4.5**
B	**4.0**
C	**3.5**
D	**3.0**
E	**2.5**
F	**2.0**
I	**1.0**