Assignment10

Sep21/ C/Assignment10

C Programming

Diploma in Advance Computing

September 2021

1. Write a macro to find min of two numbers.
2. Write a macro to find square and cube of a number
3. Write a macro to find addition of two number
4. Write a macro definition with arguments for calculation of area and perimeter of triangle, a square, a circle. Store these macro definitions in a file called ‘areaperi.h’. Include this file in your program and call the macro definitions for calculating area and perimeter for different squares, triangles and circles.
5. Write down macro definitions for the following –

a. To test whether a character is a small case letter or not.

b. To test whether a character is a upper case letter or not

1. Write macro definitions with arguments for calculation of simple interest and amount. Store these macro definitions in a file called “interest.h”. Include this file in your program and use the macro definitions for calculating simple interest and amount.
2. Create a structure Student (RollNumber, Name, Department, Course and year of joining) Accept and display details for student using functions.
3. Use above Student structure – Assume that there are not more than 50 students int he college.

a. Write a function to print names of all students who joined in a particular year.

b. Write a function to print the data of a student whose rollnumber is received by the function.

1. Create an Employee structure that holds info like employee code, name and date of joining. Write a program to create an array of structures and enter some data into it. Then ask the user to enter current date. Display the names of those employees whose tenure is greater than equal to 3 years.
2. Create a structure called Library to hold accession number, title of the book, author name, price of the book and flag indicating whether book is issued or not. Write a menu driven program that implements the working of a library. The menu options should be:

i. Add book information

ii. Display book information

iii. List the count of books in a library

iv. List all books of given author

v. Exit

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