

Tasks on 08/08/2024

Note: Write all programs in your exercise book and run them in the laboratory

A. Write a menu driven C/C++ program using structure and pointer for storing 10-12 records of a student-database containing fields: name, address, five subjects' and marks scored in each subject. Obtain the following:

1. Find the name of the students who have passed and failed in minimum three subjects (minimum pass mark of each subject is 40 out of 100).
2. Show the record of the student who has got maximum marks in Mathematics.
3. Show the record of the student who has got minimum marks in Physics.
4. Show the record of the student whose average marks is maximum.
5. Print the record of the student with name and total.

B. Write a program in C/C++ on:

A simple structure SavingsAccount for savings account used in banks as follows: Each SavingsAccount structure variable should have three data members to store the account holder's name, unique account number and balance of the account. Assume account numbers are integers and generated sequentially. Note that once an account number is allocated to an account, it does not change during the entire operational period of the account. The bank also specifies a rate of interest for all savings accounts created. Write relevant methods (such as withdraw, deposit etc.). The bank restricts that each account must have a minimum balance of Rs. 1000. Now create 100 SavingsAccount variable specifying balance at random ranging from Rs. 1,000 to 1,00,000. Now, calculate the interest for one year to be paid to each account and deposit the interest to the corresponding balance. Also find out total amount of interest to be paid to all accounts in one year. (Note: create at least 10 accounts for smooth operation)