Assignment-9

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Batch - C

```cpp
/*PROBLEM STATEMENT: Implement a map associative container in which the keys
will be the Permanent Registration Number (PRN) of the students and the values will be
the name of the respective student. Develop a program that prompts the user for PRN
and then it looks in the map, using the PRN as an index and returns the name of the
student.
*/

#include <iostream>
#include <map>
#include <string>
using namespace std;

int main() {
    //making a map where key is PRN, value is student name
    map<long long, string> studentMap;

    int n;
    cout << "Enter number of students: ";
    cin >> n;

    //I/P PRN and name of the students
    for (int i = 0; i < n; i++) {
        long long prn;
        string name;
        cout << "Enter PRN of student " << i + 1 << ": ";
        cin >> prn;
        cout << "Enter name of student " << i + 1 << ": ";
        cin.ignore();
        getline(cin, name);
        studentMap[prn] = name;
    }

    cout << "\nStudent data stored successfully!\n";

    //student's name using PRN
    long long searchPRN;
    cout << "\nEnter PRN to search: ";
```

```cpp
    cin >> searchPRN;

    //Search using find()
    auto it = studentMap.find(searchPRN);
    if (it != studentMap.end()) {
        cout << "Student Name: " << it->second << endl;
    } else {
        cout << "No student found with PRN " << searchPRN << endl;
    }

    return 0;
}
```

OUTPUT:-
Enter number of students: 3
Enter PRN of student 1: 1
Enter name of student 1: a
Enter PRN of student 2: 2
Enter name of student 2: b
Enter PRN of student 3: 3
Enter name of student 3: c

Student data stored successfully!

Enter PRN to search: 1
Student Name: a