Problem Statement: You are to design a student portal which will perform certain tasks:

registerStudents: This function loads the data from the file and stores in the memory.

displayClassInfo: This function displays the information of students' first name, last name, roll number, marks i.e quiz marks, assignments marks along in obtained marks / maximum marks.

fetchReport: This function displays the average of class for average ::= { sum of all students grandTotal / total no of students }. This function also displays the maximum numbers of each quiz and assignment.

searchStudent: This functionality will take a roll number as input from the user and will display the that students data.

- The initial main is provided to you
- You may implement more functions of your own need, getter setters and variables but make sure not to change initial structure of the class.
- The file for the input is given to you and you cannot change the structure of file. (gradesheet.txt)

```
#include<iostream>
using namespace std;
class StudentInfo
public:
      StudentInfo();
      ~StudentInfo();
      void registerStudents(ifstream& filename); // loading students from file into the
memory
      void displayClassInfo(); // displays each students informtaion
      void fetchReport(); // this function calculates and displays the average, maximum
of each quiz.
private:
      static int total_Students; // total number of students in the class
      static int total_Ouzies; // total number of guizes held in class
      static int total_Assignments; // total number of assignments assigned to all the
class
      static int* max_Numbers_Of_Quizes;// array to store maximum numbers scored in
class for each quiz
      static int* max_Numbers_Of_Assignments;//array to store maximum numbers of each
assignment in class
      static int classAverage; // stores the average for whole class
      int grandTotal; // stores the grand total of the students
      int* obt_quizes; // array to store obtained numbers in quizes
      static int* max_Quizes;// maximum numbers of each quiz
      int* obt_assignments; // array to store obtained numbers in assignments
      static int* max_Assignments; // array to store the maximum numbers of each quiz
      char roll_Number[9]; // rollnumber of student
      char* first_Name; // first name of student
      char* last_Name; // last name of student
```

```
int main() {
    char fileName = "filename.txt";
    int totalStudents;
    // open file and read the total number of students
    // total number of quizes and assignments
    // maximum numbers of each quiz and assignment
    StudentInfo* allStudents = new StudentInfo[totalStudents];
    // iterative
    allStudents->registerStudents(/* object of ifstream */);
    return NULL;
}
```

Expected Outputs:

```
Maximum in Assignment 0: 45

Maximum in Quiz 1: 14

Maximum in Assignment 1: 53

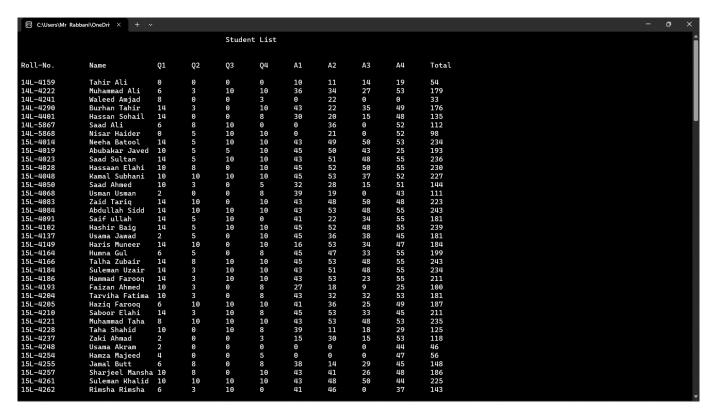
Maximum in Quiz 2: 10

Maximum in Assignment 2: 50

Maximum in Quiz 3: 10

Maximum in Assignment 3: 55

Maximum in Quiz 4: 10
```



```
Student Report

Roll Number: 14L-4159

Name: Tahir Ali

Quiz Number 1: 0

Quiz Number 2: 0

Quiz Number 3: 0

Quiz Number 4: 0

Assignment Number 1: 10

Assignment Number 2: 11

Assignment Number 3: 14

Assignment Number 4: 19
```

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