**Write a C++ program to implement default arguments based on your domain**

#include<iostream>

#include<string>

using namespace std;

class Student

{

private:

string name;

int rollNo;

float marks[3];

float average;

char grade;

public:

Student(string name = "Unknown",

int rollNo = 0,

float mark1 = 0.0,

float mark2 = 0.0,

float mark3 = 0.0)

{

this->name = name;

this->rollNo = rollNo;

this->marks[0] = mark1;

this->marks[1] = mark2;

this->marks[2] = mark3;

this->average = 0.0;

this->grade = 'F';

}

void getDetails()

{

cout << "Enter student name: ";

cin.ignore();

getline(cin, name);

cout << "Enter roll number: ";

cin >> rollNo;

cout << "Enter marks for 3 subjects:\n";

for (int i = 0; i < 3; i++)

{

cout << "Subject " << i + 1 << ": ";

cin >> marks[i];

}

}

void calculateAverage()

{

float total = 0;

for (int i = 0; i < 3; i++)

{

total += marks[i];

}

average = total / 3;

}

void calculateGrade()

{

if (average >= 90)

{

grade = 'A+';

}

else if (average >= 80)

{

grade = 'A';

}

else if (average >= 75)

{

grade = 'B+';

}

else if (average >= 70)

{

grade = 'B';

}

else if (average >= 60)

{

grade = 'C';

}

else

{

grade = 'F';

}

}

void displayDetails()

{

cout << "\nStudent Name: " << name << endl;

cout << "Roll Number: " << rollNo << endl;

cout << "Marks in 3 subjects:";

for (int i = 0; i < 3; i++)

{

cout << " " << marks[i];

}

cout << endl;

cout << "Average Marks: " << average << endl;

cout << "Grade: " << grade << endl;

}

};

int main()

{

Student defaultStudent;

defaultStudent.calculateAverage();

defaultStudent.calculateGrade();

defaultStudent.displayDetails();

Student student;

student.getDetails();

student.calculateAverage();

student.calculateGrade();

student.displayDetails();

return 0;

}