

ASSIGNMENT #3

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ID #BC210402929

(Muhammad Umair)

Question #1

Write a C++ program that calculates the total marks and average marks obtained by a student in five subjects and also computes the division based on the average marks. You are required to enter the marks for each subject out of 100 marks. The output screen should show your name and student id (VU ID), obtained marks, average marks, and division.

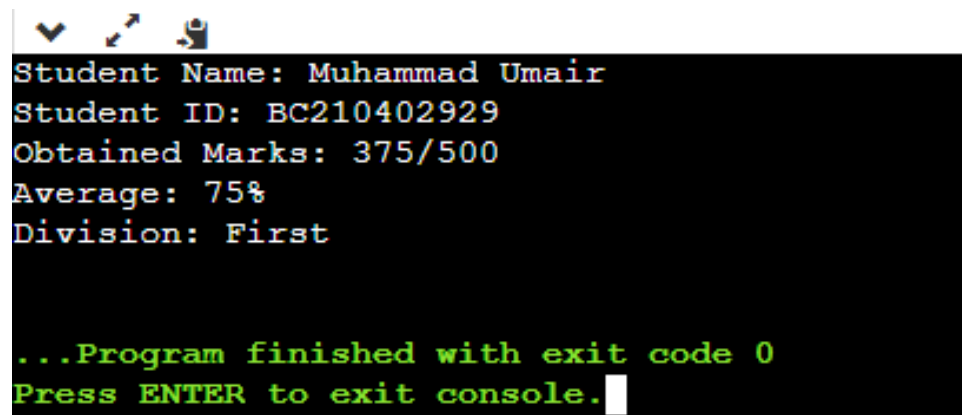
Instructions:

Use the division system mentioned below to compute the division using the if-else structure.

- Greater than or equal to 60 (First)
- Greater than or equal to 45 but less than 60 (Second)
- Greater than or equal to 33 but less than 45 (Third)
- And in case marks are less than 33% (Fail)

Solution

Output of my source code below:



```
Student Name: Muhammad Umair
Student ID: BC210402929
Obtained Marks: 375/500
Average: 75%
Division: First

...Program finished with exit code 0
Press ENTER to exit console.
```

Source Code

```
#include <iostream>
#include <cstdlib>
using namespace std;

int main() {

    // Students information:
    string name = "Muhammad Umair";
    string id = "BC210402929";
    string division;
    int total;
    float average;

    // Marks obtained in each subject:
    int eng, comp, isl, phy, math;
    cout<<"Marks obtained (English): ";
    cin>>eng;
    cout<<"Marks obtained (Computer): ";
    cin>>comp;
    cout<<"Marks obtained (Islamiyat): ";
    cin>>isl;
    cout<<"Marks obtained (Physics): ";
    cin>>phy;
    cout<<"Marks obtained (Mathematics): ";
    cin>>math;
    cout<<" "<<endl;

    // Calculating average of total marks:
    total = eng+comp+isl+phy+math;
    average = total/5;

    // Computing division by average:
    if( average >= 60 ) { division = "First"; }
    else if( average >= 45 ){ division = "Second"; }
    else if( average >= 33 ){ division = "Third"; }
    else { division = "Fail"; }

    // Printing results:
    system("clear");
    cout<<"Student Name: "<<name<<endl;
    cout<<"Student ID: "<<id<<endl;
    cout<<"Obtained Marks: "<<total<<"/500"<<endl;
    cout<<"Average: "<<average<<"%"<<endl;
    cout<<"Division: " <<division<<endl;

    return 0;

}
```