

8. Anna is a contender for valedictorian of her high school. She wants to know how many students (if any) have scored higher than her in the exams given during this semester.

Create a class named Student with the following specifications:

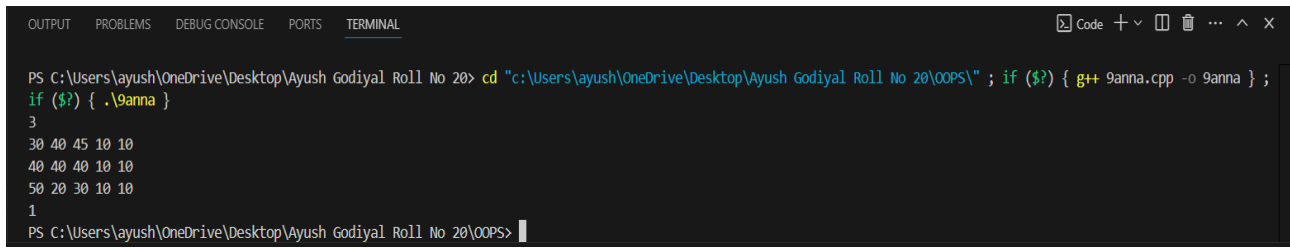
- An instance variable named scores holds a student's 5 exam scores.
- A void input () function reads 5 integers and saves them to scores.
- An int calculateTotalScore() function that returns the sum of the student's scores.

SOURCE CODE:

```
#include<iostream>
using namespace std;
class student
{
    private:
    int scores[5];
    public:
    void input()
    {
        for(int i=0;i<5;i++)
        {
            cin>>scores[i];
        }
    }
    int calculatetotalscore()
    {
        int total=0;
        for(int i=0;i<5;i++)
        {
            total=total+scores[i];
        }
        return total;
    }
};

int main()
{
    int n;
    student s;
    cin>>n;
    int score[n];
    int count=0;
    for(int i=0;i<n;i++)
    {
        s.input();
        score[i]=s.calculatetotalscore();
        if(score[i]>score[0])
        {
            count++;
        }
    }
    cout<<count<<endl;
```

```
    return 0;  
}
```



The screenshot shows a Windows Command Prompt window with the following text:

```
PS C:\Users\ayush\OneDrive\Desktop\Ayush Godiyal Roll No 20> cd "c:\Users\ayush\OneDrive\Desktop\Ayush Godiyal Roll No 20\OOPS\" ; if ($?) { g++ 9anna.cpp -o 9anna } ;  
if ($?) { .\9anna }  
3  
30 40 45 10 10  
40 40 40 10 10  
50 20 30 10 10  
1  
PS C:\Users\ayush\OneDrive\Desktop\Ayush Godiyal Roll No 20\OOPS>
```

The terminal window has a dark background with light-colored text. The title bar at the top shows 'Code' and standard window controls. The command prompt shows the user navigating to a directory and compiling a C++ file named '9anna.cpp' into an executable named '9anna'. The program then runs, outputting the number '3' followed by four lines of numbers, and finally the number '1'.