

Homework Programs

You must create a data file for each of these programs and a reasonable set of data to adequately test the program. Each Program should contain at least 3 comments, including a comment at the top that includes your name, email address and a 1 line description of the program. Your program should be properly indented and follow a reasonable structure and use meaningful variable names.

Filename: cs201hw1a.cpp

A team consist of 3 players. The total weight of a team must be less than 400 pounds. Read in the weight of 3 people, print out each person's weight and the total weight of the team and if the team weighs 400 pounds or less. Your program should work for any number of lines of data.

Example Data File

```
100 200 250
150 140 165
120 140 135
```

Filename: cs201hw1b.cpp

Write a program that will read in a persons first and last name and 3 test scores. Print out the persons name 3 test scores and the average. Your program should work for any number of lines of data.

Example Data File

```
John Smith 100 90 80
Mike Jones 70 75 85
Tom Hill 95 87 72
```

Filename: cs201hw2a.cpp

Write a program that reads in 2 test scores. Write a function that will accept the 2 scores. For each score, you should double the score and then add 10. IF the score is over 100, then make it 100. Both scores should be passed back from the function. Your program should work for any number of lines of data.

Part of your program should look like this:

```
while (cin>>s1>>s2)
{
    scores( s1, s2);
    ...
    ...
    ...
}
void scores(int &s1, int &s2 )
{
    ...
    ...
}
```

Filename: cs201hw2b.cpp

Using this program as a guide http://students.cmps.subr.edu/cs190/class_examples/ex-structure.cpp

Write a program that creates a structure that will store a student's name, ID number, age, and 3 test scores. Each line will contain a student's id, age and 3 test scores. Print out the student's id, age, 3 test scores and total number of points. Your program should work for any number of lines of data.

Example Data File

Smith 124 25 100 90 80

Jones 400 18 90 80 70

Gray 455 20 60 77 71