**Input:**

#Six types of command  
Person [Name] [Job] [Weight] [Height]

Job [Name]

WeightAverage [Name1 Name2 Name3 …]

WeightSum [Name1 Name2 Name3 …]

HeightAverage [Name1 Name2 Name3 …]

HeightSum [Name1 Name2 Name3 …]

**Output:**

After Job command:

Print the person’s job. If any data of the person is invalid, print “Unknown”.

After WeightAverage command:

Print the average weight of the listed persons. For persons whose any data is invalid, compute their weight as 0.

After WeightSum command:

Print the weight sum of the listed persons. For persons whose any data is invalid, compute their weight as 0.

After HeightAverage command:

Print the average height of the listed persons. For persons whose any data is invalid, compute their height as 0.

After HeightSum command:

Print the height sum of the listed persons. For persons whose any data is invalid, compute their height as 0.

**Comment:**

There won’t be any repeating [Name]. The Job, WeightAverage, WeightSum, HeightAverage, HeightSum commands must come after all the Person commands and will only contain existing [Name].

There will be at least one name for each Job, WeightAverage, WeightSum, HeightAverage, HeightSum command.

[Job] is guaranteed to be a one-word string.

[Weight] and [Height] are viewed as valid only if they are non-negative numbers.

Please round the numbers to the nearest integer with *Math.round(number)*.

Please implement your main function in Class Main.

We'll test your program through "java Main inputFile"

e.g java Main sampleInput

Do not read input from System.in or hard code input file, or your program won’t pass any test case.

**Upload:**

Please zip your source code and upload it.

The file name should be Team[teamID].zip. e.g. Team7.zip

The folder structure should be:

unzip Team7.zip

=> [dir] Team7

=> Team7/\*.java

**You won’t receive any point if you didn’t follow the directory structure or main class name or compressed format!**

**SampleInput:**

Person Peter Doctor 60 175

Person Jacky Actor -1 173

Person Simon Student 75 182

Person Charlie Lawyer hello 168

Job Peter

WeightAverage Simon Peter

WeightSum Peter Jacky Simon

HeightAverage Simon Charlie

Job Charlie

**SampleOutput:**

Doctor

68

135

91

Unknown