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## App Exercise – Fitness Calculations
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>These exercises reinforce Swift concepts in the context of a fitness tracking app.

Your fitness tracker keeps track of users' heart rate, but you might also want to display their average heart rate over the last hour. Create three constants, `heartRate1`, `heartRate2`, and `heartRate3`. Give each constant a different value between 60 and 100. Create a constant `addedHR` equal to the sum of all three heart rates. Now create a constant called `averageHR` that equals `addedHR` divided by 3 to get the average. Print the result.

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let heartRate1 = 69
let heartRate2 = 80
let heartRate3 = 90
let addedHR = heartRate1 + heartRate2 + heartRate3
let averageHR = addedHR/3
print (averageHR)
```

//: Now create three more constants, `heartRate1D`, `heartRate2D`, and `heartRate3D`, equal to the same values as `heartRate1`, `heartRate2`, and `heartRate3`. These new constants should be of type `Double`. Create a constant `addedHRD` equal to the sum of all three heart rates. Create a constant called `averageHRD` that equals the `addedHRD` divided by 3 to get the average of your new heart rate constants. Print the result. Does this differ from your previous average? Why or why not?

```
let heartRate1D = 69.0
let heartRate2D = 80.0
let heartRate3D = 90.0
let addedHRD = heartRate1D + heartRate2D + heartRate3D
let averageHRD = addedHRD/3
print(averageHRD)
```

//: Imagine that partway through the day a user has taken 3,467 steps out of the 10,000 step goal. Create constants `steps` and `goal`. Both will need to be of type `Double` so that you can perform accurate calculations. `steps` should be assigned the value 3,467, and `goal` should be assigned 10,000. Create a constant `percentOfGoal` that equals an expression that evaluates to the percent of the goal that has been achieved so far.

```
let steps = 3467.0
let goal = 10000.0
let percentOfGoal = steps/goal
```

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