quiz 2 - my explanation to get the answer

load the datasets of Iris

to get the mean of the Sepal.length for all the species

```
sapply(split(iris$Sepal.Length,iris$Species), mean)
    setosa versicolor  virginica
     5.006      5.936      6.588
```

Continuing with the 'iris' dataset from the previous Question, what R code returns a vector of the means of the variables 'Sepal.Length', 'Sepal.Width', 'Petal.Length', and 'Petal.Width'?

```
pply(iris[, 1:4], 2, mean)
Sepal.Length  Sepal.Width Petal.Length  Petal.Width
    5.843333     3.057333     3.758000     1.199333
>
```

How can one calculate the average miles per gallon (mpg) by number of cylinders in the CAR (cal)?

```
> tapply(mtcars$mpg, mtcars$cyl, mean)
       4        6        8
26.66364 19.74286 15.10000
>
```

Continuing with the 'mtcars' dataset from the previous Question, what is the absolute difference between the average horsepower of 4-cylinder CARS and the average horsepower of 8-cylinder cars?

```
> t<-sapply(split(mtcars$hp,mtcars$cyl),mean)
> t
       4        6        8
 82.63636 122.28571 209.21429

t[3]-t[1]
       8
126.5779
```