Assignment 1

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Question 1:

Consider the dataset about Amazon books stored given in the class web- page. Use R to compute the multiple correlation between **Amazon Price**

and (**NumPages**, **Height**, **Width** and **Thickness**). You may use direct computation or a package.

Solution:

```r
x = read.delim('amazon-books.txt')
x = na.omit(x)
dat = x[,c(3,4,6,10,11,12,13)]
names(dat) = c('lp','ap','page','h','w','t','wt')
tmp = lm(ap~page+h+w+t,data=dat)
sqrt(summary(tmp)$r.sq)
```

```
## [1] 0.5243931
```

Question 2:

Use the same data set once again to compute partial correlation between **List Price** and **Amazon Price** given **Weight** and **Thick**. You may use direct computation or a package.

Solution:

```
ap.filtered = lm(ap~w+t,data=dat)$resid
lp.filtered = lm(lp~w+t,data=dat)$resid
cor(ap.filtered, lp.filtered)
```

```
## [1] 0.9496196
```