Khan Inan
Assignment #4

1. How many rows have 293T in their name ?

I found there to be 3 with 293T in their name

	V1	V2	V3	V4	V5	V6	V7
1100	293T GNE	293	GNE:129641	X	11,12	12	9,13
3174	293T/17	293	ATCC:CRL-11268	X	11,12	12,14	9,13
5018	293T	293	DSM:ACC-635	X	11,12	12,14	9,13

2. What is the name of marker in column 7 in the table ?

The name of Column 7 is D16S539

V7
D16S539

3. What is the entry in row 2, col 7 ?

The value in row 2 of column 7 is 12

V7
D16S539
12

4. For the column labelled "D13S317 " what is most common entry ?

I got that NULL is the most common entry

```
> tail(names(sort(table(cell_id.tab$D16S539))), 1)
NULL
```

1.a
*** for both methods I first made a table with all the males and female, then a separate table for a random sample of 30 from the males and females and estimated from that

This was my method to get the 30 random samples
Using the jackknife method I got 69 for males and 63 for females and both together I got 66

1.b Using bootstrap 69.20452 for males and 63.62431 for females

```
> mean(r_samplemale$Height)
[1] 69.20452
> mean(r_sampleFemale$Height)
[1] 63.62431
```

Combine the mean would be 66.414415

1.c the mean estimate would not change much between 1000 and 10,000 samplings because it is more accurate than the jackknife method

1.d the numbers are consistent between the two however since jacknife is a rougher estimate, it is rounded to the nearest whole number

2.

```
> male_wh <- weight.height[which(weight.height[,1]=="Mal
e"),]
> #made table with all the male values
> r_samplemale <- male_wh[sample(nrow(male_wh),30),]
> #made table with random sample of 30 males
> mean(r_samplemale$Height)
[1] 69.00846
> #average estimate from the random sample
```

3.

From my calculations from the random sample the spearman correlation doesn't seem to hold up as seen below

```
> cor(r_samplemale[,2],r_samplemale[,3],method=c("spearma
n"))
[1] 0.869188
>
> cor(r_sampleFemale[,2],r_sampleFemale[,3],method=c("spear
man"))
[1] 0.8215795
>
```

The male spearman is 0.869188, and the female spearman is 0.8215795 which is not 0.9257077 (the spearman from the full set)