Week 1

```
data = readtable('Parkinsons.txt');
```

```
mean(data.age)
```

```
ans = 69.8498
```

```
median(data.age)
```

```
ans = 68
```

```
max(data.age)
```

```
ans = 265
```

```
min(data.age)
```

```
ans = -99
```

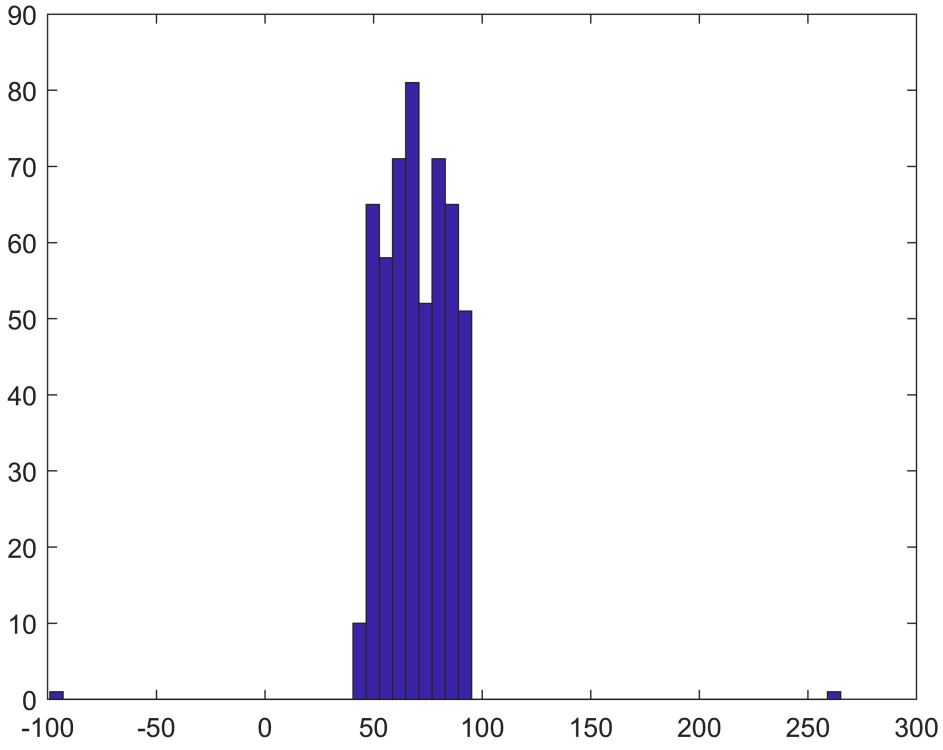
```
var(data.age)
```

```
ans = 322.6917
```

```
std(data.age)
```

```
ans = 17.9636
```

```
hist(data.age, 60)
```



This is where I removed the outliers in the data using:

```
% data([find(data.age==min(age))],:) = [];
```

I used code from someone else, but modified it a bit

Jason Joseph Rebello (2020). True Positives, False Positives, True Negatives, False Negatives from 2 Matrices (https://www.mathworks.com/matlabcentral/fileexchange/47364-true-positives-false-positives-true-negatives-false-negatives-from-2-matrices), MATLAB Central File Exchange. Retrieved January 28, 2020.

```
true_vals = data.actual + data.screen;
true_pos = length(find(true_vals == 2))
```

```
true_pos = 252
```

```
true_neg = length(find(true_vals == 0))
```

```
true_neg = 239
```

```
false_vals = data.actual - data.screen;
false_pos = length(find(false_vals == -1))
```

```
false_pos = 24
```

```
false_neg = length(find(false_vals == 1))
```

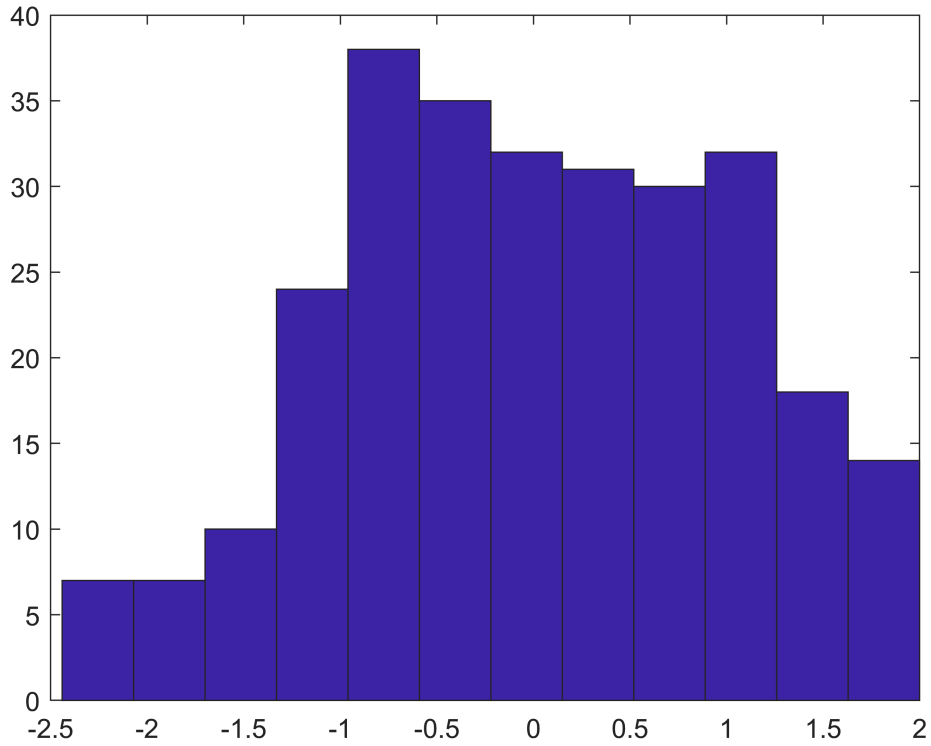
```
false_neg = 11
```

```
length(find(data.screen))/length(data.screen)
```

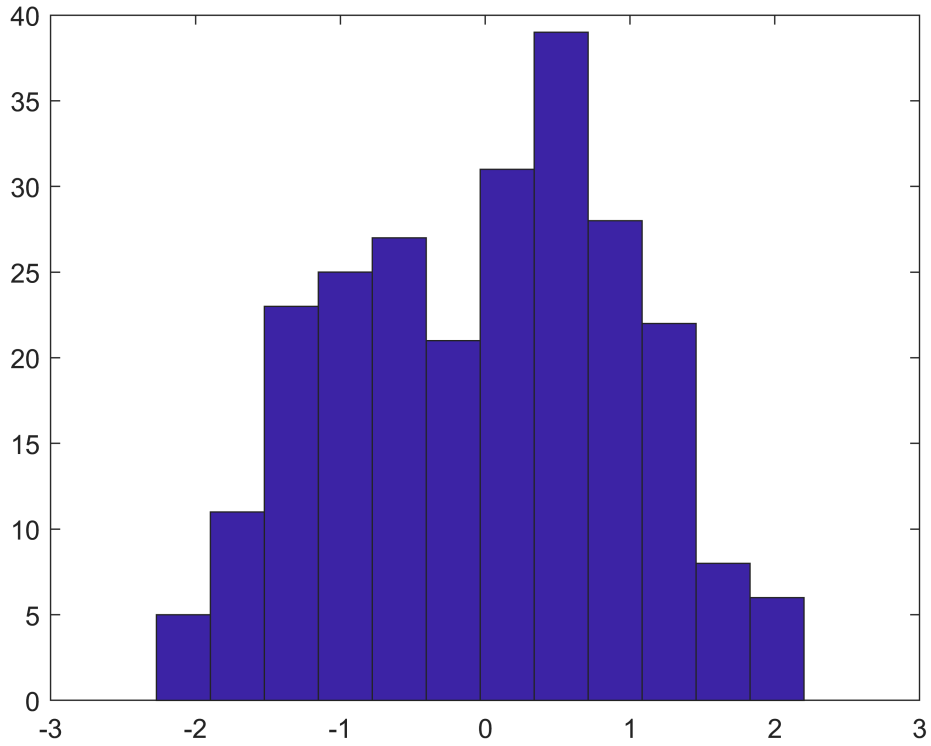
```
ans = 0.5247
```

```
ESdata = data(strcmp(data.PStype, 'ES'), :);
PSIdata = data(strcmp(data.PStype, 'PSI'), :);
zscoreESS = zscore(ESdata.PSS);
zscorePSI = zscore(PSIdata.PSS);
```

```
hist(zscoreESS, 12)
```




```
hist(zscorePSI, 12)
```



```
true_vals = ESdata.actual + ESdata.screen;
true_pos = length(find(true_vals == 2))
```

```
true_pos = 129
```

```
true_neg = length(find(true_vals == 0))
```

```
true_neg = 135
```

```
false_vals = ESdata.actual - ESdata.screen;
false_pos = length(find(false_vals == -1))
```

```
false_pos = 11
```

```
false_neg = length(find(false_vals == 1))
```

```
false_neg = 3
```