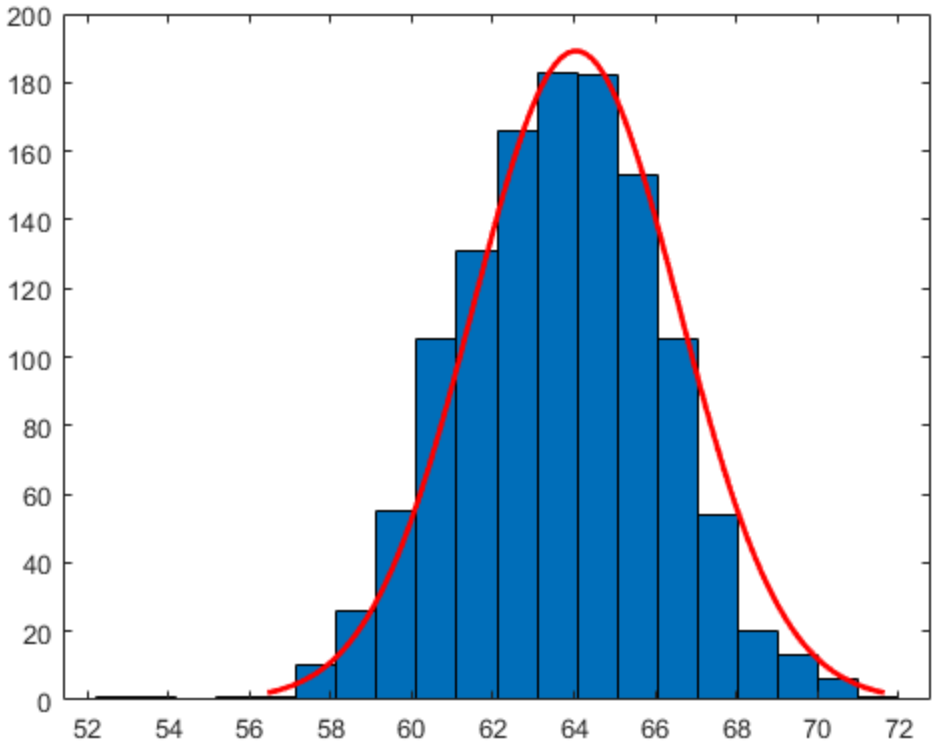
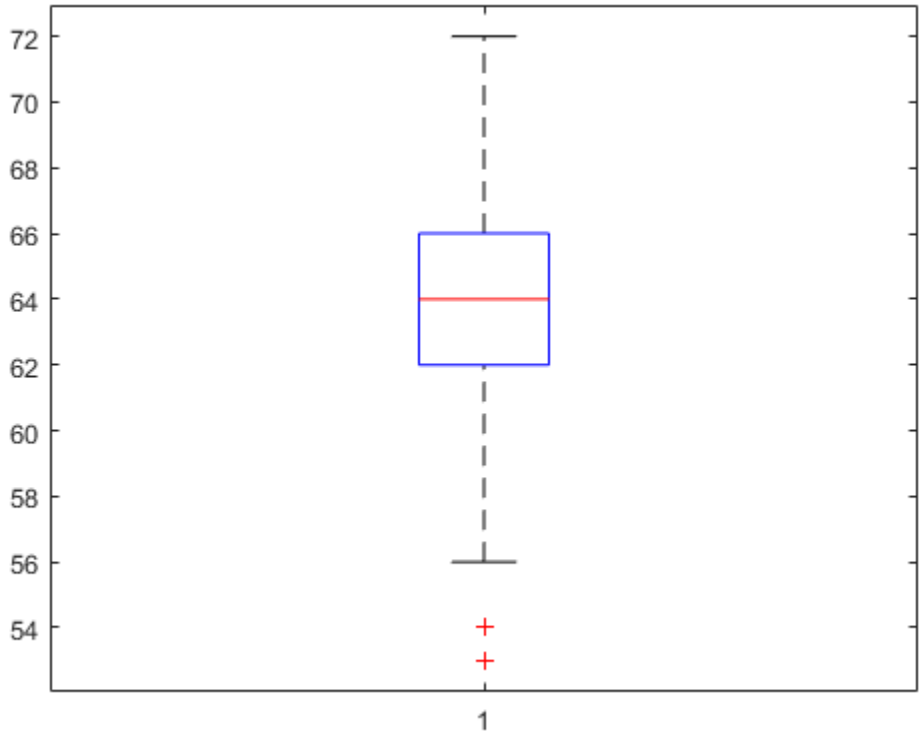
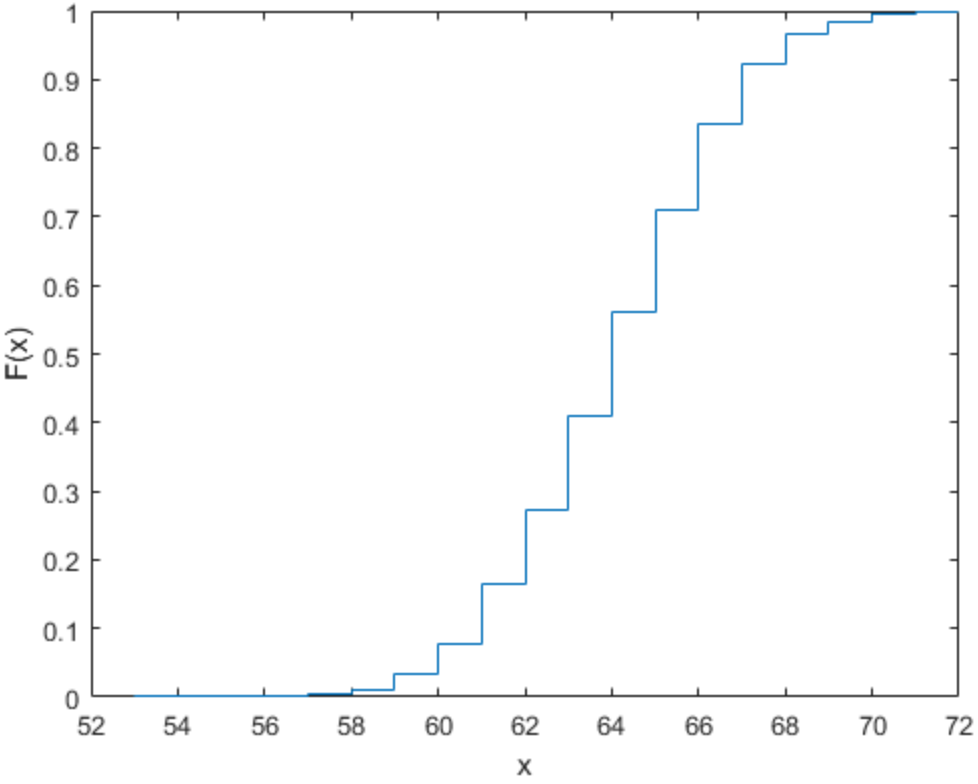
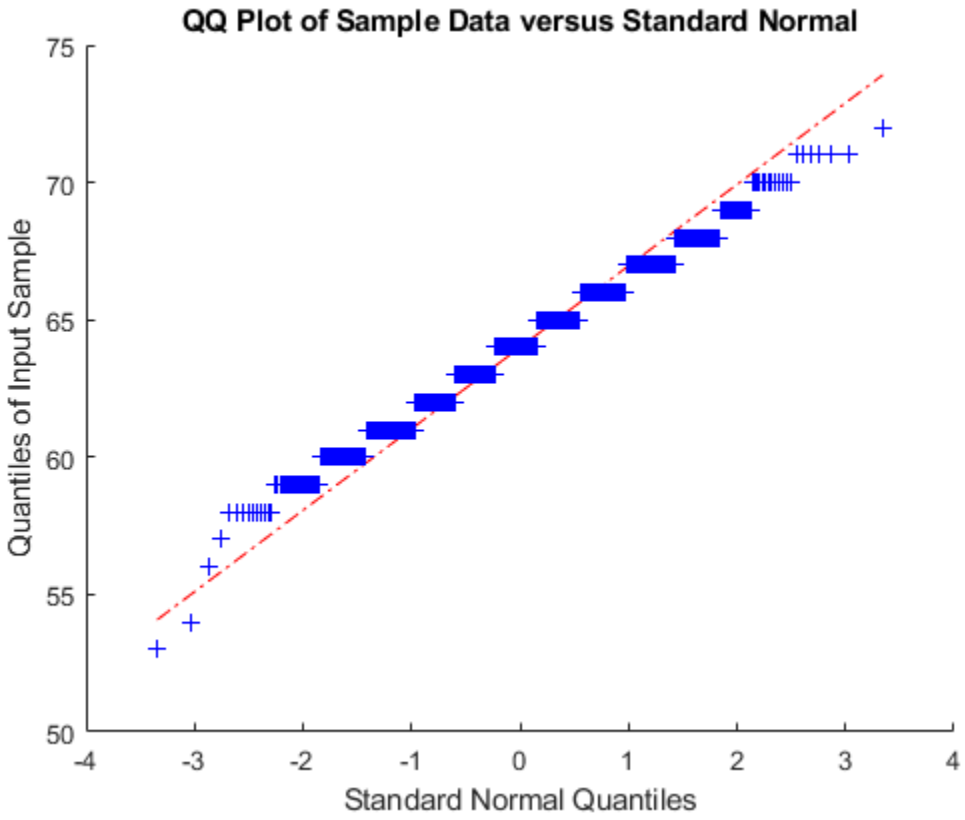
```
A = importdata("birth.txt");
A(A(:,5) == 99, :) = [];
H = A(:,5);
figure(1);
histfit(H,20)
% (a) 20 bins seems to be optimal for representing the shape of the
% distribution.
disp([mean(H) median(H) std(H) iqr(H)])
% (b) Since the mean and median are very close to each other, the
 center of
% the sample is well-defined.
figure(2);
boxplot(H)
figure(3);
ecdf(H)
figure(4);
qqplot(H)
% (c) I would consider the sample as being approximately normal with μ
 =
% 64.05 and #^2 = 6.42
S=A;
N=A;
S(S(:,7) == 9, :) = [];
S(S(:,7) == 0, :) = [];
figure(5);
boxplot(S(:,5))
N(N(:,7) == 9, :) = [];
N(N(:,7) == 1, :) = [];
figure(6);
boxplot(N(:,5))
% (d) On average, the two groups seem to be around the same height as
 the
% median and quartiles are at about the same value.
```

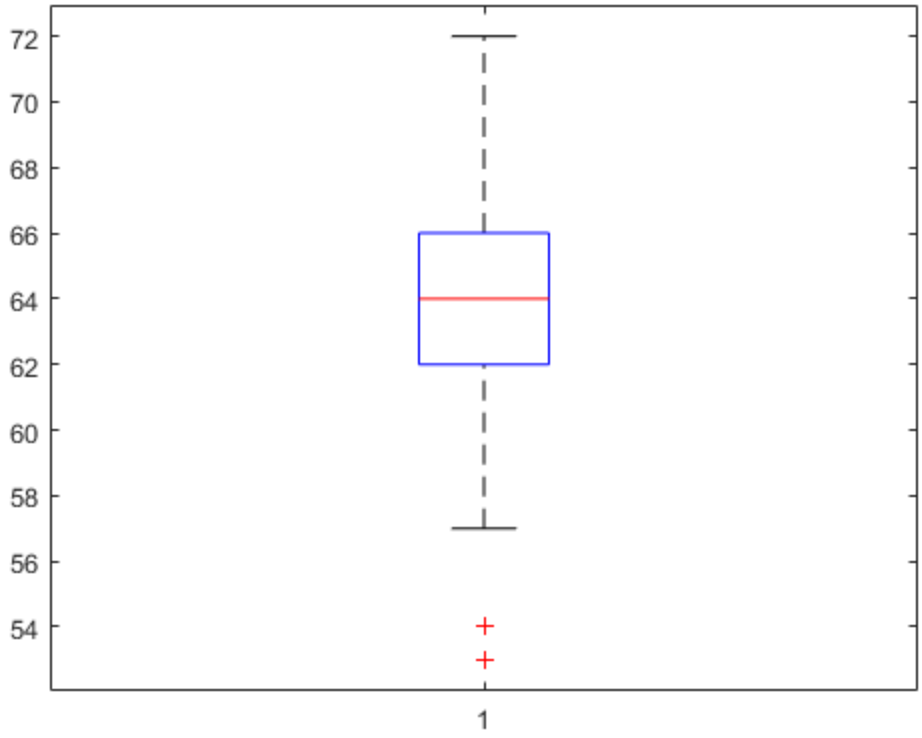
```
   64.0478   64.0000    2.5334    4.0000
```

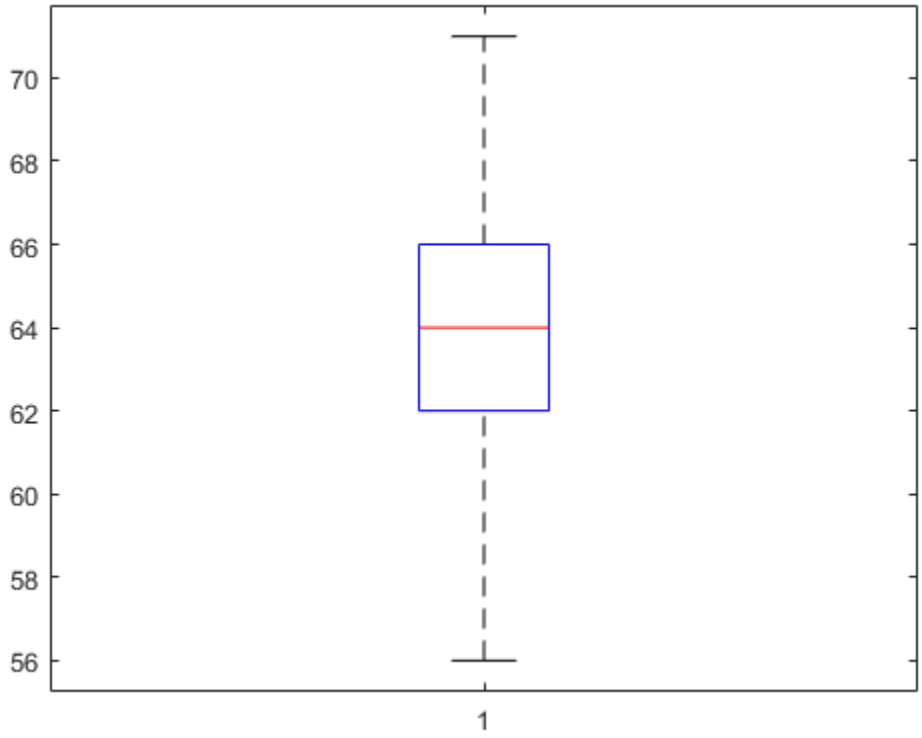

200
180
160
140
120
100
80
60
40
20
0
52
54
56
58
60
62
64
66
68
70
72


72
70
68
66
64
62
60
58
56
54
1


F(x)
x
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
52
54
56
58
60
62
64
66
68
70
72


QQ Plot of Sample Data versus Standard Normal
Quantiles of Input Sample
Standard Normal Quantiles
50
55
60
65
70
75
-4
-3
-2
-1
0
1
2
3
4


72
70
68
66
64
62
60
58
56
54
1


70
68
66
64
62
60
58
56
1

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