MA 750: HW2

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Exercise 2.4

par(mfrow = c(2,3))

```
#take a peak at the data
head(iris)
      Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1
                 5.1
                               3.5
                                               1.4
                                                              0.2
                                                                   setosa
## 2
                 4.9
                               3.0
                                               1.4
                                                              0.2
                                                                    setosa
## 3
                 4.7
                               3.2
                                               1.3
                                                              0.2
                                                                   setosa
## 4
                 4.6
                               3.1
                                               1.5
                                                              0.2
                                                                   setosa
## 5
                 5.0
                               3.6
                                               1.4
                                                              0.2 setosa
                 5.4
                               3.9
                                               1.7
                                                              0.4 setosa
#Take a look at multiple bandwidths
par(mfrow = c(2,3))
for(h in seq(.1, .8, .1)){
  plot(density(iris$Petal.Length, bw = h, kernel = "gaussian"), xlab = "", ylab = "Petal Length", main =
}
           Bandwidth: 0.1
                                               Bandwidth: 0.2
                                                                                    Bandwidth: 0.3
                                                                            0.4
    9.0
                                        9.7
                                    Petal Length
Petal Length
                                                                        Petal Length
    9.4
                                                                            0.2
                                        0.2
    0.2
                                                                            0.1
    0.0
                                        0.0
                                                                             0.0
            2 3
                  4 5
                         6
                                                 2 3 4 5 6 7
                                                                                 0
           Bandwidth: 0.4
                                               Bandwidth: 0.5
                                                                                    Bandwidth: 0.6
                                                                            0.20
                                        0.20
                                                                        Petal Length
Petal Length
    0.10 0.20
                                    Petal Length
                                        0.10
                                                                            0.10
    0.00
                                        0.00
                                                                             0.00
              2
                                                                                       2
                   4
                        6
                             8
                                                   2
                                                            6
                                                                                                6
#Take a look at multiple bandwidths
```

