MA 750: HW2

Benjamin Draves

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Exercise 2.4

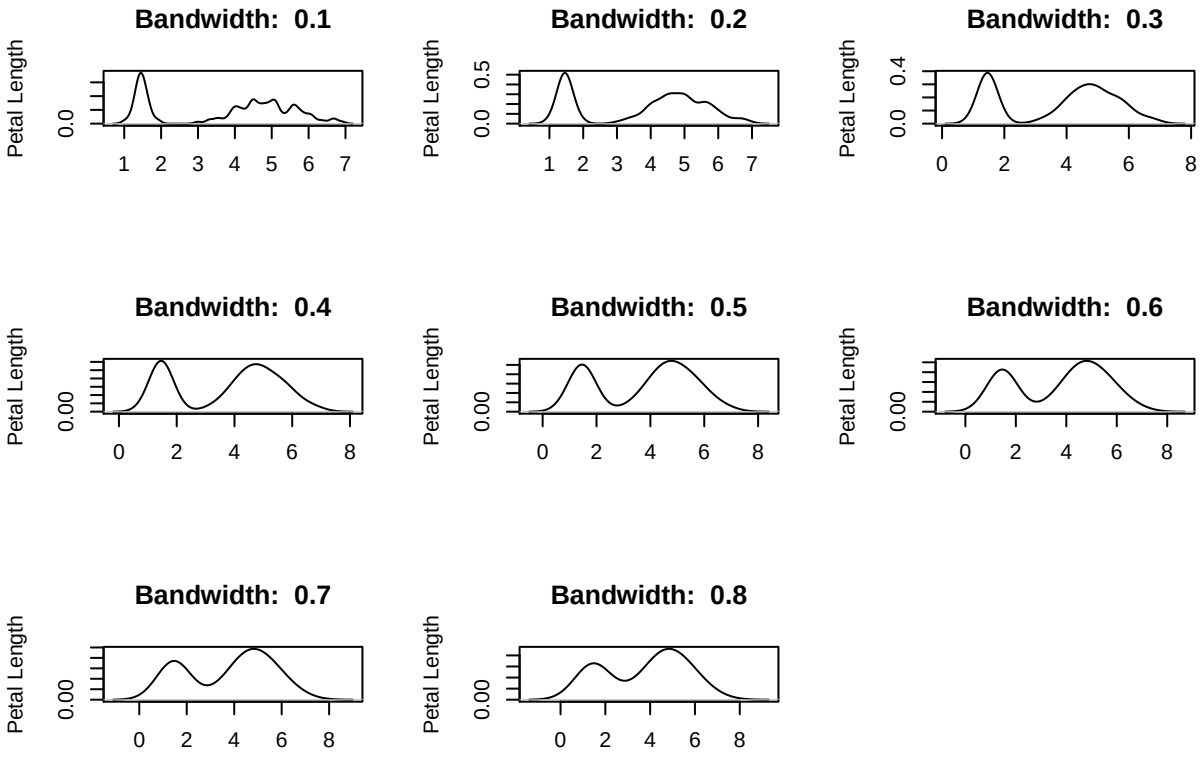
```
#take a peak at the data
head(iris)
```

```
##   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
## 6          5.4         3.9          1.7         0.4  setosa
```

```
#Take a look at multiple bandwidths
par(mfrow = c(3,3))
for(h in seq(.1, .8, .1)){
  plot(density(iris$Petal.Length, bw = h, kernel = "gaussian"), xlab ="", ylab = "Petal Length", main =
}

#Take a look at multiple kerenels
kernels = c("gaussian", "epanechnikov", "rectangular","triangular", "biweight","cosine", "optcosine")

par(mfrow = c(3,3))
```



```r
for(kern in kernels){
  plot(density(iris$Petal.Length, bw =0.2 , kernel = kern), xlab ="", ylab = "Petal Length", main = pas
}
```