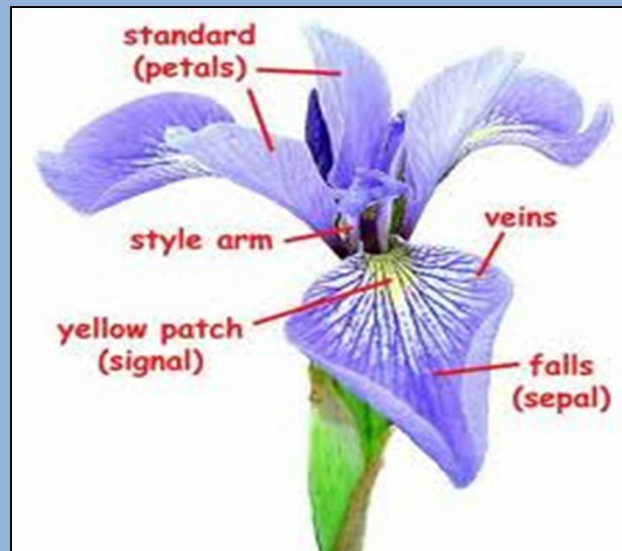


Homework #4



Species	SepalLength	SepalWidth	PetalLength	PetalWidth
Setosa	50	33	14	2
Setosa	46	34	14	3
Setosa	46	36	10	2
Setosa	51	33	17	5
Setosa	48	31	16	2
Setosa	52	34	14	2
Setosa	49	36	14	1
Setosa	44	32	13	2
Setosa	44	30	13	2
Setosa	47	32	16	2
Setosa	48	30	14	3

Sample Code

1. Load the IRIS dataset
2. Read the data and:
 - Store every **fifth** record in a "test" dataset starting with the first record
 - Store the rest in the "training" dataset
3. Use knn with $k=1$ and classify the test dataset
4. Measure the performance of knn
5. Repeat the above steps with $k=2$, $k=5$, $k=10$.

Sample Code

```
library(class)
?knn()

rm(list=ls())

?data()
data(iris)
View(iris)

idx<-sample(nrow(iris),as.integer(.70*nrow(iris)))
training<-iris[idx,]
test<-iris[-idx,]
knn(training[,-5],test[,-5],training[,5])
```