## **Assignment 4.3**

```
1. states = rownames(USArrests)
       • Get states names with 'w'.
       • Get states names with 'W'.
       library(stringr)
       states=rownames(USArrests)
       print(states)
       small_w < - 'w'
       big_w <- 'W'
       nameswith_w <- states[str_detect(states , small_w )]</pre>
       nameswith_W <- states[str_detect(states , big_w )]</pre>
       #Name with w
       print(nameswith_w)
       #Name with W
       print(nameswith_W)
```

Screenshot of the output and R file attached.

## 2. Prepare a histogram of the number of characters in each US State.

Same R file is used for both the questions . R file and histogram png file attached

```
library(stringr)

states=rownames(USArrests)

print(states)

#Number of charactors
charactor_numbers <- nchar(states)
print(charactor_numbers)

png(file = "citynames.png")

# Create the histogram.
hist(charactor_numbers,xlab = "Number of Charectors",col = "yellow",border = "blue")

# Save the file.
dev.off()
```