

1. How many vowels are there in the names of USA States?

```
States <- rownames(USArrests)
library(stringi)
library(stringr)
vowelsa <- str_count(States, pattern = ("[a,A]"))
vowelse <- str_count(States, pattern = ("[e,E]"))
vowelsi <- str_count(States, pattern = ("[i,I]"))
vowelso <- str_count(States, pattern = ("[o,O]"))
vowelsu <- str_count(States, pattern = ("[u,U]"))
sum(vowelsa, vowelse, vowelsi, vowelso, vowelsu)
A <- sum(vowelsa)
E <- sum(vowelse)
I <- sum(vowelsi)
O <- sum(vowelso)
U <- sum(vowelsu)
```

```
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> library(stringi)
> library(stringr)
> vowelsa <- str_count(States, pattern = ("[a,A]"))
> vowelse <- str_count(States, pattern = ("[e,E]"))
> vowelsi <- str_count(States, pattern = ("[i,I]"))
> vowelso <- str_count(States, pattern = ("[o,O]"))
> vowelsu <- str_count(States, pattern = ("[u,U]"))
> sum(vowelsa, vowelse, vowelsi, vowelso, vowelsu)
[1] 177
> A <- sum(vowelsa)
> A
[1] 61
> E <- sum(vowelse)
> E
[1] 28
> I <- sum(vowelsi)
> I
[1] 44
> O <- sum(vowelso)
> O
[1] 36
> U <- sum(vowelsu)
> U
[1] 8
```

2. Visualize the vowels distribution.

```
USAstates <- data.frame(USstates = c("a","e","i","o","u"), frq = c(A,E,I,O,U))
USAstates
barplot(USAstates$frq, main = "USA States", ylab = "count",
        xlab = "vowels", col = "steelblue", ylim = c(0,70))
```

USA States

