#### HW3 ####

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**#### Question 1 ####**

# Split each string in the vector presidents into two strings, according to the first and last names. Save the results as "president.list"

presidents <- c("Bill Clinton", "George Bush", "Ronald Reagan", "Jimmy Carter", "Gerald Ford")

president.list <- strsplit(presidents, " ")

[[1]]

[1] "Bill" "Clinton"

[[2]]

[1] "George" "Bush"

[[3]]

[1] "Ronald" "Reagan"

[[4]]

[1] "Jimmy" "Carter"

[[5]]

[1] "Gerald" "Ford"

# create president.first as a vector of president.

president <- unlist(president.list)

president.first <- president[seq(1,length(president),2)]

[1] "Bill" "George" "Ronald" "Jimmy" "Gerald"

**#### Question 2 ####**

bill <- "Bill Clinton"

others.first <- c("George", "Ronald", "Jimmy", "Gerald")

others.second <- c("Bush", "Reagan", "Carter", "Ford")

# Using paste combine others.first and others.second to have others

others <- paste(others.first, others.second)

[1] "George Bush" "Ronald Reagan" "Jimmy Carter" "Gerald Ford"

# Display the president names that include "al"

grep("al", others, value=TRUE)

[1] "Ronald Reagan" "Gerald Ford"

# Display the last 5 characters from each of the strings in the vector 'others'

replacelastfive <- substr(others,nchar(others)-4,nchar(others))

[1] " Bush" "eagan" "arter" " Ford"

# Combine 'bill' and 'others' into one vector 'president' and replace the first 3

letters in each strings in 'president' with 'abc'

president <- c(bill,others)

substr(president, 1, 3) <- "abc"

president

[1] "abcl Clinton" "abcrge Bush" "abcald Reagan" "abcmy Carter" "abcald Ford"