# Load package

library(tidyverse)

glimpse(CancerCombinedFile3)

# Rename works for Columns

names(CancerCombinedFile3)[names(CancerCombinedFile3) == "State\_name"] <- "State"

names(CancerCombinedFile3)[names(CancerCombinedFile3) == "Race\_name"] <- "Race"

names(CancerCombinedFile3)[names(CancerCombinedFile3) == "Percentage population below poverty"] <- "Poverty%"

names(CancerCombinedFile3)[names(CancerCombinedFile3) == "Percentage population insured"] <- "Insured"

glimpse(CancerCombinedFile3)

Cancer <- CancerCombinedFile3[, 2:9]

head(Cancer, n=10)

#Re-coding

library(dplyr)

library(gapminder)

Cancer$NameR <- NA

Cancer$NameR[Cancer$Name=='Cervix Uteri'] <- 0

Cancer$NameR[Cancer$Name=='Corpus Uteri'] <- 1

Cancer$NameR[Cancer$Name=='Uterus, NOS'] <- 2

Cancer$NameR[Cancer$Name=='Ovary'] <- 3

Cancer$NameR[Cancer$Name=='Vagina'] <- 4

Cancer$NameR[Cancer$Name=='Vulva'] <- 5

Cancer$NameR[Cancer$Name=='Other Female Genital Organs'] <- 6

Cancer$NameR <- NA

Cancer$NameR[Cancer$Name=='Cervix Uteri'] <- 0

Cancer$NameR[Cancer$Name=='Corpus Uteri'] <- 1

Cancer$NameR[Cancer$Name=='Uterus, NOS'] <- 2

Cancer$NameR[Cancer$Name=='Ovary'] <- 3

Cancer$NameR[Cancer$Name=='Vagina'] <- 4

Cancer$NameR[Cancer$Name=='Vulva'] <- 5

Cancer$NameR[Cancer$Name=='Other Female Genital Organs'] <- 6

library(plyr)

# This rename code works for data in a column

Cancer$Race[Cancer$Race == "American Indian or Alaska Native"] <- "NativeAmer"

Cancer$Race[Cancer$Race == "Black or African American"] <- "AfricanAmer"

Cancer$Race[Cancer$Race == "White"] <- "Caucasian"

Cancer$Race[Cancer$Race == "Other Races and Unknown combined"] <- "Other"

Cancer$Race[Cancer$Race == "Asian or Pacific Islander"] <- "AsianAmer"

glimpse(Cancer)

Cancer$StateR <- NA

Cancer$StateR[Cancer$State=='Alabama'] <- 0

Cancer$StateR[Cancer$State=='Alaska'] <- 1

Cancer$StateR[Cancer$State=='Arizona'] <- 2

Cancer$StateR[Cancer$State=='Arkansas'] <- 3

Cancer$StateR[Cancer$State=='California'] <- 4

Cancer$StateR[Cancer$State=='Colorado'] <- 5

Cancer$StateR[Cancer$State=='Connecticut'] <- 6

Cancer$StateR[Cancer$State=='District of Columbia'] <- 7

Cancer$StateR[Cancer$State=='Georgia'] <- 8

Cancer$StateR[Cancer$State=='Idaho'] <- 9

Cancer$StateR[Cancer$State=='Indiana'] <- 10

Cancer$StateR[Cancer$State=='Kansas'] <- 11

Cancer$StateR[Cancer$State=='Louisiana'] <- 12

Cancer$StateR[Cancer$State=='Maryland'] <- 13

Cancer$StateR[Cancer$State=='Michigan'] <- 14

Cancer$StateR[Cancer$State=='Mississippi'] <- 15

Cancer$StateR[Cancer$State=='Montana'] <- 16

Cancer$StateR[Cancer$State=='Nevada'] <- 17

Cancer$StateR[Cancer$State=='New Jersey'] <- 18

Cancer$StateR[Cancer$State=='New York'] <- 19

Cancer$StateR[Cancer$State=='North Dakota'] <- 20

Cancer$StateR[Cancer$State=='Oklahoma'] <- 21

Cancer$StateR[Cancer$State=='Pennsylvania'] <- 22

Cancer$StateR[Cancer$State=='South Carolina'] <- 23

Cancer$StateR[Cancer$State=='Tennessee'] <- 24

Cancer$StateR[Cancer$State=='Utah'] <- 25

Cancer$StateR[Cancer$State=='Virginia'] <- 26

Cancer$StateR[Cancer$State=='West Virginia'] <- 27

Cancer$StateR[Cancer$State=='Wyoming'] <- 28

Cancer$StateR[Cancer$State=='Delaware'] <- 29

Cancer$StateR[Cancer$State=='Florida'] <- 30

Cancer$StateR[Cancer$State=='Hawaii'] <- 31

Cancer$StateR[Cancer$State=='Illinois'] <- 32

Cancer$StateR[Cancer$State=='Iowa'] <- 33

Cancer$StateR[Cancer$State=='Kentucky'] <- 34

Cancer$StateR[Cancer$State=='Maine'] <- 35

Cancer$StateR[Cancer$State=='Massachusetts'] <- 36

Cancer$StateR[Cancer$State=='Minnesota'] <- 37

Cancer$StateR[Cancer$State=='Missouri'] <- 38

Cancer$StateR[Cancer$State=='Nebraska'] <- 39

Cancer$StateR[Cancer$State=='New Hampshire'] <- 40

Cancer$StateR[Cancer$State=='New Mexico'] <- 41

Cancer$StateR[Cancer$State=='North Carolina'] <- 42

Cancer$StateR[Cancer$State=='Ohio'] <- 43

Cancer$StateR[Cancer$State=='Oregon'] <- 44

Cancer$StateR[Cancer$State=='Rhode Island'] <- 45

Cancer$StateR[Cancer$State=='South Dakota'] <- 46

Cancer$StateR[Cancer$State=='Texas'] <- 47

Cancer$StateR[Cancer$State=='Vermont'] <- 48

Cancer$StateR[Cancer$State=='Washington'] <- 49

Cancer$StateR[Cancer$State=='Wisconsin'] <- 50

unique(Cancer$Race)

Cancer$RaceR <- NA

Cancer$RaceR[Cancer$Race=="NativeAmer"]<-0

Cancer$RaceR[Cancer$Race=="AfricanAmer"]<-1

Cancer$RaceR[Cancer$Race=="Caucasian"]<-2

Cancer$RaceR[Cancer$Race=="Other"]<-3

Cancer$RaceR[Cancer$Race=="AsianAmer"]<-4

Cancer2 <- Cancer[, 5:11]

head(Cancer2, n=10)