

Data 607 Assignment 1

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Week 1 Homework-Data 607-Assignment 1

```
getwd()

## [1] "C:/Users/Emahayz_Pro/Desktop/Data_Science/Data 607/Week1"

setwd("C:/Users/Emahayz_Pro/Desktop/Data_Science/Data 607/Week1")

# Assignment - Loading Data into a Data Frame
Mushrooms<-read.csv("https://archive.ics.uci.edu/ml/machine-learning-
databases/mushroom/agaricus-lepiota.data", header= FALSE, sep=",")[,1:4]
```

Task 1:

You should take the data, and create a data frame with a subset of the columns in the dataset.

You should include the column that indicates edible or poisonous and three or four other columns.

```
colnames(Mushrooms) <- c("classes", "capshape", "capsurface", "capcolor") #
Selecting columns
head(Mushrooms) # The original Mushrooms file is successfully read and the
columns listed.

##   classes capshape capsurface capcolor
## 1      p        x          s         n
## 2      e        x          s         y
## 3      e        b          s         w
## 4      p        x          y         w
## 5      e        x          s         g
## 6      e        x          y         y
```

Task 2:

You should also add meaningful column names and replace the abbreviations used in the data

```
# Colname = classes
Mushrooms$classes <-as.character(Mushrooms$classes)
Mushrooms$classes [Mushrooms$classes %in% "e"] <- "edible"
Mushrooms$classes [Mushrooms$classes %in% "p"] <- "poisonous"
```

```

# Colname = capshape
Mushrooms$capshape <- as.character(Mushrooms$capshape)
Mushrooms$capshape [Mushrooms$capshape %in% "b"] <- "bell"
Mushrooms$capshape [Mushrooms$capshape %in% "c"] <- "conical"
Mushrooms$capshape [Mushrooms$capshape %in% "x"] <- "convex"
Mushrooms$capshape [Mushrooms$capshape %in% "f"] <- "flat"
Mushrooms$capshape [Mushrooms$capshape %in% "k"] <- "knobbed"
Mushrooms$capshape [Mushrooms$capshape %in% "s"] <- "sunken"

# Colname = capsurface
Mushrooms$capsurface <- as.character(Mushrooms$capsurface)
Mushrooms$capsurface [Mushrooms$capsurface %in% "f"] <- "fibrous"
Mushrooms$capsurface [Mushrooms$capsurface %in% "g"] <- "grooves"
Mushrooms$capsurface [Mushrooms$capsurface %in% "y"] <- "scaly"
Mushrooms$capsurface [Mushrooms$capsurface %in% "s"] <- "smooth"

# Colname = capcolor
Mushrooms$capcolor <- as.character(Mushrooms$capcolor)
Mushrooms$capcolor [Mushrooms$capcolor %in% "n"] <- "brown"
Mushrooms$capcolor [Mushrooms$capcolor %in% "b"] <- "buff"
Mushrooms$capcolor [Mushrooms$capcolor %in% "c"] <- "cinnamon"
Mushrooms$capcolor [Mushrooms$capcolor %in% "g"] <- "gray"
Mushrooms$capcolor [Mushrooms$capcolor %in% "r"] <- "green"
Mushrooms$capcolor [Mushrooms$capcolor %in% "p"] <- "pink"
Mushrooms$capcolor [Mushrooms$capcolor %in% "u"] <- "purple"
Mushrooms$capcolor [Mushrooms$capcolor %in% "e"] <- "red"
Mushrooms$capcolor [Mushrooms$capcolor %in% "w"] <- "white"
Mushrooms$capcolor [Mushrooms$capcolor %in% "y"] <- "yellow"

```

View the first few rows again

```
head(Mushrooms)
```

```

##      classes capshape capsurface capcolor
## 1 poisonous   convex    smooth   brown
## 2  edible    convex    smooth   yellow
## 3  edible     bell     smooth   white
## 4 poisonous   convex    scaly    white
## 5  edible    convex    smooth   gray
## 6  edible    convex    scaly    yellow

```