

Week1 Mushroom

Sedo

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Import Data

Also, setnames of columns

```
library(data.table)

mushroom_DB = read.csv("https://archive.ics.uci.edu/ml/machine-learning-databases/mushroom/agaricus-lep
mushroom_DB = data.table(mushroom_DB)
names(mushroom_DB) <-
  c(
    "Poison_Edible",
    "cap_shape",
    "cap_surface",
    "cap_color",
    "bruises",
    "odor",
    "gill_attachment",
    "gill_spacing",
    "gill_size",
    "gill_color",
    "stalk_shape",
    "stalk_root",
    "stalk_surface_above_ring",
    "stalk_surface_below_ring",
    "stalk_color_above_ring",
    "stalk_color_below_ring",
    "veil_type",
    "veil_color",
    "ring_number",
    "ring_type",
    "spore_print_color",
    "population",
    "habitat"
  )
```

Subset and Transformation

```
mushroom_DB_sub <- mushroom_DB[,c(1,2:4,6)]

library(car)
mushroom_DB_sub$Poison_Edible <- recode(mushroom_DB_sub$Poison_Edible, "'e'='edible'; 'p'='poisonous'")
mushroom_DB_sub$cap_shape <- recode(mushroom_DB_sub$cap_shape, "'b'='bell'; 'c'='conical'; 'x'='convex'; 'l'='lobate'")
mushroom_DB_sub$cap_surface <- recode(mushroom_DB_sub$cap_surface, "'f'='fibrous'; 'g'='grooves'; 'y'='scaly'; 's'='smooth'")
mushroom_DB_sub$cap_color <- recode(mushroom_DB_sub$cap_color, "'n'='brown'; 'b'='buff'; 'c'='cinnamon'; 'g'='gray'; 'p'='pink'; 'r'='red'; 't'='tan'; 'w'='white'; 'y'='yellow'")
mushroom_DB_sub$odor <- recode(mushroom_DB_sub$odor, "'a'='almond'; 'l'='anise'; 'c'='creosote'; 'y'='fishy'; 'n'='none'; 'o'='other'")
```

```
summary(mushroom_DB_sub)
```

```
##      Poison_Edible      cap_shape      cap_surface      cap_color
## edible   :4208 bell      : 452 fibrous:2320 brown   :2284
## poisonous:3916 conical:   4 grooves:   4 gray    :1840
##          convex :3656 scaly  :3244 red     :1500
##          flat   :3152 smooth :2556 yellow  :1072
##          knobbed: 828          white  :1040
##          sunken :  32          buff   : 168
##                                     (Other): 220
##      odor
## none     :3528
## foul     :2160
## fishy    : 576
## spicy    : 576
## almond   : 400
## anise    : 400
## (Other)  : 484
```