Lab Assignment 3

Raghul V

15/03/2022

```
names_v <- c()</pre>
for(i in letters){
for(j in letters){ for(k in letters){
names_v <- c(names_v, sprintf('%s%s%s',i,j,k)) }}}</pre>
Emp_data <- data.frame(</pre>
emp_{id} = sample(seq(1000,9999),500),
emp_name = sample(names_v, 500),
emp_dept = sample(rep(c("R&D","HR","Marketing"),1000), 500), e_salary = sample(seq(10000,99999),500)
)
head(Emp_data)
##
     emp_id emp_name emp_dept e_salary
## 1
       6717
                 ivz
                          R&D
                                  99604
## 2
       5093
                 aou
                          R&D
                                  43890
## 3
      7847
                          R&D
                                  58237
                 lzc
## 4
       3617
                 pkm
                           HR
                                  25162
## 5
       9685
                 blm
                          R&D
                                  80529
       2996
## 6
                 rvf
                           HR
                                  50035
summary(Emp_data)
##
        emp_id
                     emp_name
                                         emp_dept
                                                              e_salary
##
  Min.
          :1053
                   Length:500
                                       Length:500
                                                           Min. :10082
   1st Qu.:3238
                   Class :character
                                       Class : character
                                                           1st Qu.:30720
  Median:5479
                   Mode :character Mode :character
                                                           Median :51782
  Mean :5549
                                                           Mean :53588
##
    3rd Qu.:7859
                                                           3rd Qu.:76882
    Max.
           :9939
                                                                  :99983
head(Emp_data[,c(2,4)])
     emp_name e_salary
## 1
                 99604
          ivz
## 2
                 43890
          aou
## 3
          lzc
                 58237
                 25162
          pkm
## 5
                 80529
          blm
## 6
          rvf
                 50035
```

```
Emp_data[c(1,5),]
##
     emp_id emp_name emp_dept e_salary
## 1
       6717
                  ivz
                           R&D
                                   99604
                                   80529
## 5
       9685
                  blm
                           R&D
Emp_data[c(1,5),c(2,4)]
##
     emp_name e_salary
## 1
                  99604
          ivz
## 5
                  80529
          blm
head(Emp_data[order(Emp_data$emp_id),])
                         emp_dept e_salary
##
       emp_id emp_name
## 353
         1053
                              R&D
                                      83857
                    wxg
## 205
         1061
                               HR
                                      11826
                    avz
## 455
                              R&D
         1062
                    jcu
                                      84253
## 331
         1068
                    bxj
                              R&D
                                      76402
## 256
         1083
                    lcy Marketing
                                      73727
## 210
         1104
                              R&D
                                      98158
                    nde
new_data <- c()</pre>
for(i in Emp_data$e_salary){
if(i > 20000){new_data <- c(new_data, 1)} else{new_data <- c(new_data, 0)}</pre>
}
Emp_data$binary <- new_data</pre>
head(Emp_data)
##
     emp_id emp_name emp_dept e_salary binary
## 1
       6717
                           R&D
                                  99604
                  ivz
                                              1
## 2
       5093
                  aou
                           R&D
                                   43890
                                              1
## 3
       7847
                  lzc
                           R&D
                                  58237
                                              1
## 4
       3617
                  pkm
                            HR
                                   25162
                                              1
## 5
       9685
                 blm
                           R&D
                                  80529
                                              1
## 6
       2996
                  rvf
                            HR
                                   50035
write.csv(Emp_data,'/Users/raghul/Downloads/Emp_data.csv', row.names = FALSE)
```