R version 4.2.1 (2022-06-23 ucrt) -- "Funny-Looking Kid"

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Platform: x86\_64-w64-mingw32/x64 (64-bit)

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[Workspace loaded from ~/.RData]

> knitr::opts\_chunk$set(echo = TRUE)

> knitr::opts\_chunk$set(dev = c('pdf', 'png'),

+ fig.align = 'center', fig.height = 5, fig.width = 8.5,

+ pdf.options(encoding = "ISOLatin9.enc"))

>

> library(class)

Warning: package ‘class’ was built under R version 4.2.2

> library(caret)

Warning: package ‘caret’ was built under R version 4.2.2Loading required package: ggplot2

Warning: package ‘ggplot2’ was built under R version 4.2.2Loading required package: lattice

Registered S3 method overwritten by 'data.table':

method from

print.data.table

> library(e1071)

> library(dplyr)

Warning: package ‘dplyr’ was built under R version 4.2.2

Attaching package: ‘dplyr’

The following objects are masked from ‘package:stats’:

filter, lag

The following objects are masked from ‘package:base’:

intersect, setdiff, setequal, union

> library(jsonlite)

Warning: package ‘jsonlite’ was built under R version 4.2.2

> library(ggplot2)

> library(ggthemes)

Warning: package ‘ggthemes’ was built under R version 4.2.2

> library(tidyverse)

Warning: package ‘tidyverse’ was built under R version 4.2.2Registered S3 methods overwritten by 'dbplyr':

method from

print.tbl\_lazy

print.tbl\_sql

── **Attaching packages** ───────────────────────────────────────────────────────────────── tidyverse 1.3.2 ──✔ tibble 3.1.8 ✔ purrr 1.0.0

✔ tidyr 1.2.1 ✔ stringr 1.5.0

✔ readr 2.1.3 ✔ forcats 0.5.2Warning: package ‘tibble’ was built under R version 4.2.2Warning: package ‘tidyr’ was built under R version 4.2.2Warning: package ‘readr’ was built under R version 4.2.2Warning: package ‘purrr’ was built under R version 4.2.2Warning: package ‘stringr’ was built under R version 4.2.2Warning: package ‘forcats’ was built under R version 4.2.2── **Conflicts** ──────────────────────────────────────────────────────────────────── tidyverse\_conflicts() ──

✖ dplyr::filter() masks stats::filter()

✖ purrr::flatten() masks jsonlite::flatten()

✖ dplyr::lag() masks stats::lag()

✖ purrr::lift() masks caret::lift()

> library(gridExtra)

Warning: package ‘gridExtra’ was built under R version 4.2.2

Attaching package: ‘gridExtra’

The following object is masked from ‘package:dplyr’:

combine

> CaseStudy2 = read.csv(file.choose(), header = TRUE)

> View(CaseStudy2)

> ?read.csv

> CaseStudy2 = read.csv(file.choose(), header = TRUE, sep = ",")

> View(CaseStudy2)

> CaseStudy2 = read.table(file.choose(), header = TRUE, sep = ",")

> View(CaseStudy2)

> CaseStudy2 = read.table(file.choose(), header = TRUE, sep = ",")

> View(CaseStudy2)

> CaseStudy2 = read.csv(file.choose(), header = TRUE, sep = ",")

> View(CaseStudy2)

> CS2 = read.csv\_(file.choose(), header = TRUE, sep = ",")

Error in read.csv\_(file.choose(), header = TRUE, sep = ",") :

could not find function "read.csv\_"

> CS2 = read.csv(file.choose(), header = TRUE, sep = ",")

> View(CS2)

> CS2 = read.csv(file.choose(), header = TRUE, sep = ",", quote = "\"",

+ dec = ".", fill = TRUE, comment.char = "")

> View(CS2)

> CS2 <- read.csv(file.choose(), header = TRUE, sep = ",")

> View(CS2)

> install.packages("xlsx")

Installing package into ‘C:/Users/tgarn/AppData/Local/R/win-library/4.2’

(as ‘lib’ is unspecified)

also installing the dependencies ‘rJava’, ‘xlsxjars’

trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.2/rJava\_1.0-6.zip'

Content type 'application/zip' length 1245703 bytes (1.2 MB)

downloaded 1.2 MB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.2/xlsxjars\_0.6.1.zip'

Content type 'application/zip' length 9485708 bytes (9.0 MB)

downloaded 9.0 MB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.2/xlsx\_0.6.5.zip'

Content type 'application/zip' length 374996 bytes (366 KB)

downloaded 366 KB

package ‘rJava’ successfully unpacked and MD5 sums checked

package ‘xlsxjars’ successfully unpacked and MD5 sums checked

package ‘xlsx’ successfully unpacked and MD5 sums checked

The downloaded binary packages are in

C:\Users\tgarn\AppData\Local\Temp\RtmpKKxp2t\downloaded\_packages

> library(xlsx)

Warning: package ‘xlsx’ was built under R version 4.2.3Error: package or namespace load failed for ‘xlsx’:

.onLoad failed in loadNamespace() for 'rJava', details:

call: fun(libname, pkgname)

error: JAVA\_HOME cannot be determined from the Registry

> #install.packages("xlsx")

> library(xlsx)

Warning: package ‘xlsx’ was built under R version 4.2.3Error: package or namespace load failed for ‘xlsx’:

.onLoad failed in loadNamespace() for 'rJava', details:

call: fun(libname, pkgname)

error: JAVA\_HOME cannot be determined from the Registry

> install.packages("readxl")

Error in install.packages : Updating loaded packages

> library(readxl)

Warning: package ‘readxl’ was built under R version 4.2.2

> install.packages("readxl")

Warning in install.packages :

package ‘readxl’ is in use and will not be installed

> CS2 = readxl::read\_excel(file.choose())

> View(CS2)

>

> working <- CS2 %>% filter(Attrition == "No")

> View(working)

> working <- CS2 %>% filter(Attrition == "No")

> View(working)

> notworking <- CS2 %>% filter(Attrition == "Yes")

> View(notworking)

> tenure1 <- max(CS2$YearsAtCompany)

> tenure1

[1] 40

> plot(Age ~ YearAtCompany, data = notworking)

Error in eval(predvars, data, env) : object 'YearAtCompany' not found

> A <- notworking %>% plot(Age ~ YearAtCompany)

Error in plot.new() : figure margins too large

> notworking

# A tibble: 140 × 36

ID Age Attrition BusinessTr…¹ Daily…² Depar…³ Dista…⁴ Educa…⁵ Educa…⁶ Emplo…⁷ Emplo…⁸ Envir…⁹ Gender Hourl…˟ JobIn…˟

*<dbl>* *<dbl>* *<chr>* *<chr>* *<dbl>* *<chr>* *<dbl>* *<dbl>* *<chr>* *<dbl>* *<dbl>* *<dbl>* *<chr>* *<dbl>* *<dbl>*

1 28 33 Yes Travel\_Rare… 603 Sales 9 4 Market… 1 1157 1 Female 77 3

2 29 53 Yes Travel\_Rare… 1168 Sales 24 4 Life S… 1 1968 1 Male 66 3

3 37 35 Yes Travel\_Rare… 737 Sales 10 3 Medical 1 1639 4 Male 55 2

4 38 36 Yes Travel\_Rare… 1456 Sales 13 5 Market… 1 1733 2 Male 96 2

5 47 32 Yes Travel\_Rare… 964 Sales 1 2 Life S… 1 1734 1 Male 34 1

6 49 18 Yes Travel\_Freq… 1306 Sales 5 3 Market… 1 614 2 Male 69 3

7 57 42 Yes Travel\_Freq… 933 Resear… 19 3 Medical 1 752 3 Male 57 4

8 60 25 Yes Travel\_Freq… 599 Sales 24 1 Life S… 1 1273 3 Male 73 1

9 61 36 Yes Travel\_Rare… 530 Sales 3 1 Life S… 1 967 3 Male 51 2

10 65 24 Yes Travel\_Rare… 984 Resear… 17 2 Life S… 1 1219 4 Female 97 3

# … with 130 more rows, 21 more variables: JobLevel <dbl>, JobRole <chr>, JobSatisfaction <dbl>, MaritalStatus <chr>,

# MonthlyIncome <dbl>, MonthlyRate <dbl>, NumCompaniesWorked <dbl>, Over18 <chr>, OverTime <chr>,

# PercentSalaryHike <dbl>, PerformanceRating <dbl>, RelationshipSatisfaction <dbl>, StandardHours <dbl>,

# StockOptionLevel <dbl>, TotalWorkingYears <dbl>, TrainingTimesLastYear <dbl>, WorkLifeBalance <dbl>,

# YearsAtCompany <dbl>, YearsInCurrentRole <dbl>, YearsSinceLastPromotion <dbl>, YearsWithCurrManager <dbl>, and

# abbreviated variable names ¹​BusinessTravel, ²​DailyRate, ³​Department, ⁴​DistanceFromHome, ⁵​Education, ⁶​EducationField,

# ⁷​EmployeeCount, ⁸​EmployeeNumber, ⁹​EnvironmentSatisfaction, ˟​HourlyRate, ˟​JobInvolvement

# ℹ Use `print(n = ...)` to see more rows, and `colnames()` to see all variable names

> hist(notworking$Age)

>

>

> hist(notworking$Age)

> hist(notworking$YearsAtCompany)

>

>

> hist(notworking$Age, main = "Not Working and Age")

> hist(notworking$YearsAtCompany, main = "Not working and Years at the Company")

>

> hist(notworking$Age, main = "Not Working and Age")

> hist(notworking$YearsAtCompany, main = "Not working and Years at the Company", xlab = "Age", ylab = "Number of employees lost")

> hist(notworking$Age, main = "Age when employment ended", xlab = "Age", ylab = "Number of employees lost")

> hist(notworking$YearsAtCompany, main = "Years at the Company when employment ended", xlab = "Number of Years at the Company", ylab = "Number of employees lost")

> summary(notworking$Age)

Min. 1st Qu. Median Mean 3rd Qu. Max.

18.00 28.00 32.00 33.79 39.00 58.00

> summary(notworking$YearsAtCompany)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 1.000 3.000 5.193 8.000 40.000

> t.test(notworking$Age)

One Sample t-test

data: notworking$Age

t = 41.578, df = 139, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

32.17907 35.39235

sample estimates:

mean of x

33.78571

> t.test(notworking$YearsAtCompany)

One Sample t-test

data: notworking$YearsAtCompany

t = 9.9562, df = 139, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

4.161622 6.224092

sample estimates:

mean of x

5.192857

> hist(working$Age, main = "Age when employment ended", xlab = "Age", ylab = "Number of employees remaining")

> hist(working$YearsAtCompany, main = "Years at the Company when this data was taken", xlab = "Number of Years at the Company", ylab = "Number of employees lost")

> summary(working$Age)

Min. 1st Qu. Median Mean 3rd Qu. Max.

18.00 31.00 36.00 37.41 43.00 60.00

> summary(working$YearsAtCompany)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 3.000 6.000 7.301 10.000 33.000

> hist(working$Age, main = "Age when data was recorded", xlab = "Age", ylab = "Number of employees remaining")

> hist(working$YearsAtCompany, main = "Years at the Company when this data was recorded", xlab = "Number of Years at the Company", ylab = "Number of employees lost")

> summary(working$Age)

Min. 1st Qu. Median Mean 3rd Qu. Max.

18.00 31.00 36.00 37.41 43.00 60.00

> summary(working$YearsAtCompany)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 3.000 6.000 7.301 10.000 33.000

> hist(working$Age, main = "Age when data was recorded", xlab = "Age", ylab = "Number of employees remaining")

> hist(working$YearsAtCompany, main = "Years at the Company when this data was recorded", xlab = "Number of Years at the Company", ylab = "Number of employees remaining")

> summary(working$Age)

Min. 1st Qu. Median Mean 3rd Qu. Max.

18.00 31.00 36.00 37.41 43.00 60.00

> summary(working$YearsAtCompany)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 3.000 6.000 7.301 10.000 33.000

> t.test(working$Age)

One Sample t-test

data: working$Age

t = 116.54, df = 729, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

36.78210 38.04256

sample estimates:

mean of x

37.41233

> t.test(working$YearsAtCompany)

One Sample t-test

data: working$YearsAtCompany

t = 33.233, df = 729, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

6.870042 7.732697

sample estimates:

mean of x

7.30137

> values <- c(ID,Age,Attrition,BusinessTravel,DailyRate,Department,DistanceFromHome,Education,EducationField,EmployeeCount,EmployeeNumber,EnvironmentSatisfaction,Gender,HourlyRate,JobInvolvement,JobLevel,JobRole,JobSatisfaction,MaritalStatus,MonthlyIncome,MonthlyRate,NumCompaniesWorked,Over18,OverTime,PercentSalaryHike,PerformanceRating,RelationshipSatisfaction,StandardHours,StockOptionLevel,TotalWorkingYears,TrainingTimesLastYear,WorkLifeBalance,YearsAtCompany,YearsInCurrentRole,YearsSinceLastPromotion,YearsWithCurrManager)

Error: object 'ID' not found

> values <- notworking %>% c(ID,Age,Attrition,BusinessTravel,DailyRate,Department,DistanceFromHome,Education,EducationField,EmployeeCount,EmployeeNumber,EnvironmentSatisfaction,Gender,HourlyRate,JobInvolvement,JobLevel,JobRole,JobSatisfaction,MaritalStatus,MonthlyIncome,MonthlyRate,NumCompaniesWorked,Over18,OverTime,PercentSalaryHike,PerformanceRating,RelationshipSatisfaction,StandardHours,StockOptionLevel,TotalWorkingYears,TrainingTimesLastYear,WorkLifeBalance,YearsAtCompany,YearsInCurrentRole,YearsSinceLastPromotion,YearsWithCurrManager)

Error in notworking %>% c(ID, Age, Attrition, BusinessTravel, DailyRate, :

object 'ID' not found

> notworking$ID

[1] 28 29 37 38 47 49 57 60 61 65 73 75 81 88 92 93 109 127 137 139 151 158 162 166 177 178 201 204 207 208 222 233 236

[34] 244 254 261 262 263 268 279 287 298 299 300 305 313 332 333 336 339 358 362 363 377 380 385 390 398 415 423 429 433 437 439 443 453

[67] 465 469 472 485 486 487 489 501 502 503 507 510 517 520 522 530 535 539 568 572 588 592 593 600 605 613 614 621 625 640 644 645 647

[100] 650 655 668 669 674 687 689 692 694 699 704 716 719 729 732 733 734 747 751 752 754 760 761 774 780 781 788 796 798 799 804 820 824

[133] 827 832 841 849 851 857 860 863

> unique(notworking$BusinessTravel)

[1] "Travel\_Rarely" "Travel\_Frequently" "Non-Travel"

> unique(notworking$Department)

[1] "Sales" "Research & Development" "Human Resources"

> unique(notworking$EducationField)

[1] "Marketing" "Life Sciences" "Medical" "Other" "Technical Degree" "Human Resources"

> unique(notworking$JobRole)

[1] "Sales Executive" "Sales Representative" "Research Scientist" "Laboratory Technician"

[5] "Manufacturing Director" "Healthcare Representative" "Manager" "Human Resources"

[9] "Research Director"

> unique(notworking$Gender)

[1] "Female" "Male"

> unique(notworking$Attrition)

[1] "Yes"

> unique(notworking$MaritalStatus)

[1] "Single" "Married" "Divorced"

> unique(notworking$OverTime)

[1] "Yes" "No"

> unique(notworking$Over18)

[1] "Y"

> unique(notworking$StandardHours)

[1] 80

> notworking$BusinessTravel

[1] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently"

[7] "Travel\_Frequently" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[13] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently"

[19] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Non-Travel" "Travel\_Rarely"

[25] "Travel\_Rarely" "Travel\_Frequently" "Non-Travel" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[31] "Travel\_Frequently" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently"

[37] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently"

[43] "Non-Travel" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Frequently"

[49] "Travel\_Frequently" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely"

[55] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely"

[61] "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[67] "Travel\_Frequently" "Non-Travel" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[73] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely"

[79] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[85] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely"

[91] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Frequently" "Travel\_Rarely"

[97] "Non-Travel" "Non-Travel" "Non-Travel" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely"

[103] "Travel\_Rarely" "Travel\_Frequently" "Travel\_Frequently" "Travel\_Rarely" "Non-Travel" "Travel\_Frequently"

[109] "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Rarely" "Travel\_Rarely"

[115] "Travel\_Frequently" "Non-Travel" "Travel\_Rarely" "Travel\_Frequently" "Travel\_Frequently" "Travel\_Rarely"

[121] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[127] "Travel\_Frequently" "Travel\_Rarely" "Non-Travel" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Frequently"

[133] "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely" "Travel\_Rarely"

[139] "Travel\_Rarely" "Non-Travel"

> notworking$BusinessTravel <- str\_replace(notworking$BusinessTravel,"Travel\_Rarely", "1")

> notworking$BusinessTravel <- str\_replace(notworking$BusinessTravel,"Travel\_Frequently", "2")

> notworking$BusinessTravel <- str\_replace(notworking$BusinessTravel,"Non-Travel", "0")

> notworking$BusinessTravel

[1] "1" "1" "1" "1" "1" "2" "2" "2" "1" "1" "1" "1" "1" "1" "1" "1" "1" "2" "1" "1" "1" "2" "0" "1" "1" "2" "0" "1" "1" "1" "2" "2" "1"

[34] "1" "1" "2" "1" "1" "1" "1" "1" "2" "0" "1" "1" "2" "1" "2" "2" "2" "1" "2" "1" "1" "1" "1" "2" "1" "2" "1" "1" "2" "1" "1" "1" "1"

[67] "2" "0" "2" "1" "1" "1" "1" "1" "1" "2" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "2" "1" "1" "1" "1" "2" "2" "1" "0" "0" "0"

[100] "1" "2" "1" "1" "2" "2" "1" "0" "2" "2" "1" "1" "2" "1" "1" "2" "0" "1" "2" "2" "1" "1" "1" "1" "1" "1" "1" "2" "1" "0" "1" "1" "2"

[133] "1" "1" "1" "1" "1" "1" "1" "0"

> notworking$Department <- str\_replace(notworking$Department,"Sales", "0")

> notworking$Department <- str\_replace(notworking$Department,"Research & Development", "1")

> notworking$Department <- str\_replace(notworking$Department,"Human Resources", "2")

> notworking$Department

[1] "0" "0" "0" "0" "0" "0" "1" "0" "0" "1" "1" "0" "1" "1" "0" "1" "1" "1" "1" "1" "0" "1" "1" "0" "1" "1" "0" "1" "0" "1" "0" "0" "0"

[34] "0" "2" "0" "1" "1" "1" "0" "1" "1" "1" "1" "1" "1" "0" "1" "1" "0" "1" "0" "0" "1" "1" "1" "0" "2" "0" "0" "1" "1" "1" "0" "1" "0"

[67] "1" "0" "1" "1" "0" "0" "1" "1" "1" "0" "0" "1" "0" "1" "1" "1" "1" "0" "0" "1" "0" "0" "0" "1" "0" "1" "0" "1" "1" "0" "1" "1" "1"

[100] "1" "1" "1" "1" "1" "1" "1" "1" "1" "0" "2" "2" "0" "1" "0" "2" "0" "2" "0" "0" "0" "0" "1" "1" "1" "0" "1" "1" "1" "1" "0" "0" "1"

[133] "0" "0" "1" "0" "0" "1" "1" "0"

> notworking$EducationField <- str\_replace(notworking$EducationField,"Marketing", "0")

> notworking$EducationField <- str\_replace(notworking$EducationField,"Life Sciences", "1")

> notworking$EducationField <- str\_replace(notworking$EducationField,"Medical", "2")

> notworking$EducationField <- str\_replace(notworking$EducationField,"Other", "3")

> notworking$EducationField <- str\_replace(notworking$EducationField,"Technical Degree", "4")

> notworking$EducationField <- str\_replace(notworking$EducationField,"Human Resources", "5")

> notworking$EducationField

[1] "0" "1" "2" "0" "1" "0" "2" "1" "1" "1" "1" "1" "2" "3" "1" "3" "2" "1" "1" "2" "2" "1" "4" "2" "2" "1" "1" "1" "0" "2" "1" "1" "1"

[34] "1" "5" "1" "4" "2" "1" "0" "1" "1" "2" "2" "4" "1" "2" "2" "2" "3" "4" "4" "0" "1" "1" "1" "4" "4" "0" "1" "1" "1" "2" "0" "1" "1"

[67] "4" "2" "1" "2" "1" "2" "1" "2" "1" "2" "0" "4" "0" "1" "2" "1" "3" "4" "1" "3" "1" "2" "4" "2" "0" "1" "3" "1" "2" "0" "4" "1" "2"

[100] "1" "4" "2" "1" "1" "3" "1" "1" "4" "2" "2" "5" "3" "4" "2" "5" "3" "5" "0" "1" "1" "0" "1" "2" "2" "0" "2" "1" "2" "2" "4" "0" "2"

[133] "0" "0" "1" "0" "1" "4" "2" "0"

> notworking$JobRole <- str\_replace(notworking$JobRole,"Sales Executive", "0")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Sales Representative", "1")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Research Scientist", "2")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Laboratory Technician", "3")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Manufacturing Director", "4")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Healthcare Representative", "5")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Manager", "6")

> notworking$JobRole <- str\_replace(notworking$JobRole,"Human Resources", "7")

> notworking$JobRole

[1] "0" "0" "0" "0" "0" "1"

[7] "2" "1" "0" "3" "4" "0"

[13] "5" "3" "0" "3" "5" "2"

[19] "3" "3" "0" "5" "5" "1"

[25] "6" "2" "0" "2" "0" "5"

[31] "0" "0" "0" "1" "7" "1"

[37] "2" "3" "3" "0" "2" "3"

[43] "2" "2" "2" "2" "0" "2"

[49] "2" "0" "2" "1" "6" "3"

[55] "2" "2" "1" "7" "1" "0"

[61] "3" "3" "2" "1" "3" "0"

[67] "2" "0" "2" "5" "0" "1"

[73] "3" "4" "3" "1" "1" "Research Director"

[79] "1" "3" "3" "2" "3" "1"

[85] "0" "2" "1" "0" "1" "2"

[91] "1" "3" "1" "3" "3" "1"

[97] "2" "2" "3" "3" "3" "3"

[103] "3" "2" "5" "3" "6" "2"

[109] "1" "7" "7" "0" "3" "0"

[115] "7" "0" "7" "1" "1" "0"

[121] "6" "2" "2" "2" "1" "2"

[127] "2" "3" "2" "0" "0" "3"

[133] "0" "1" "3" "0" "0" "2"

[139] "5" "0"

> notworking$JobRole <- str\_replace(notworking$JobRole,"Research Director", "8")

> notworking$JobRole

[1] "0" "0" "0" "0" "0" "1" "2" "1" "0" "3" "4" "0" "5" "3" "0" "3" "5" "2" "3" "3" "0" "5" "5" "1" "6" "2" "0" "2" "0" "5" "0" "0" "0"

[34] "1" "7" "1" "2" "3" "3" "0" "2" "3" "2" "2" "2" "2" "0" "2" "2" "0" "2" "1" "6" "3" "2" "2" "1" "7" "1" "0" "3" "3" "2" "1" "3" "0"

[67] "2" "0" "2" "5" "0" "1" "3" "4" "3" "1" "1" "8" "1" "3" "3" "2" "3" "1" "0" "2" "1" "0" "1" "2" "1" "3" "1" "3" "3" "1" "2" "2" "3"

[100] "3" "3" "3" "3" "2" "5" "3" "6" "2" "1" "7" "7" "0" "3" "0" "7" "0" "7" "1" "1" "0" "6" "2" "2" "2" "1" "2" "2" "3" "2" "0" "0" "3"

[133] "0" "1" "3" "0" "0" "2" "5" "0"

> notworking$Gender <- str\_replace(notworking$Gender,"Female", "1")

> notworking$Gender <- str\_replace(notworking$Gender,"Male", "0")

> notworking$Gender

[1] "1" "0" "0" "0" "0" "0" "0" "0" "0" "1" "0" "0" "1" "0" "1" "0" "1" "1" "1" "0" "0" "0" "0" "1" "0" "0" "1" "1" "1" "0" "1" "0" "0"

[34] "0" "0" "1" "0" "0" "0" "0" "0" "0" "0" "0" "0" "1" "0" "0" "1" "0" "1" "0" "1" "1" "1" "0" "1" "1" "1" "0" "0" "0" "0" "0" "0" "0"

[67] "0" "0" "0" "1" "1" "0" "0" "1" "0" "1" "1" "1" "0" "0" "0" "1" "0" "1" "0" "1" "0" "1" "0" "0" "1" "1" "0" "1" "0" "0" "0" "0" "0"

[100] "0" "0" "0" "0" "1" "1" "0" "0" "0" "1" "1" "0" "0" "0" "1" "1" "0" "0" "1" "1" "1" "1" "1" "0" "0" "1" "0" "0" "1" "1" "0" "1" "0"

[133] "0" "0" "0" "0" "1" "1" "1" "0"

> notworking$Attrition <- str\_replace(notworking$Attrition,"Yes", "1")

> notworking$Attrition

[1] "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1"

[34] "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1"

[67] "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1"

[100] "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1" "1"

[133] "1" "1" "1" "1" "1" "1" "1" "1"

> notworking$MaritalStatus <- str\_replace(notworking$MaritalStatus,"Single", "0")

> notworking$MaritalStatus <- str\_replace(notworking$MaritalStatus,"Married", "1")

> notworking$MaritalStatus <- str\_replace(notworking$MaritalStatus,"Divorced", "2")

> notworking$MaritalStatus

[1] "0" "0" "1" "2" "0" "0" "2" "0" "1" "1" "1" "0" "1" "2" "1" "0" "1" "0" "1" "1" "2" "2" "0" "0" "1" "1" "0" "0" "0" "1" "1" "1" "1"

[34] "1" "1" "0" "0" "1" "0" "0" "0" "0" "0" "1" "0" "0" "1" "2" "0" "0" "1" "0" "1" "0" "1" "1" "0" "1" "2" "1" "0" "0" "0" "1" "0" "0"

[67] "1" "0" "0" "1" "0" "0" "0" "1" "0" "1" "0" "1" "1" "0" "1" "1" "1" "0" "1" "0" "0" "0" "1" "1" "0" "1" "0" "0" "0" "2" "1" "2" "0"

[100] "0" "0" "2" "1" "2" "0" "0" "1" "0" "0" "1" "1" "0" "0" "1" "1" "1" "2" "0" "0" "1" "0" "0" "1" "1" "0" "1" "0" "1" "0" "0" "0" "1"

[133] "1" "0" "0" "1" "1" "0" "1" "0"

> notworking$Over18 <- str\_replace(notworking$Over18,"Yes", "1")

> notworking$Over18

[1] "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y"

[34] "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y"

[67] "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y"

[100] "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y"

[133] "Y" "Y" "Y" "Y" "Y" "Y" "Y" "Y"

> notworking$Over18 <- str\_replace(notworking$Over18,"Yes", "1")

> View(notworking)

> notworking$OverTime <- str\_replace(notworking$OverTime,"Yes", "1")

> notworking$OverTime <- str\_replace(notworking$OverTime,"No", "0")

> View(notworking)

> notworking$Over18 <- str\_replace(notworking$Over18,"Y", "1")

> View(notworking)

> summary(notworking)

ID Age Attrition BusinessTravel DailyRate Department DistanceFromHome

Min. : 28.0 Min. :18.00 Length:140 Length:140 Min. : 103.0 Length:140 Min. : 1.00

1st Qu.:259.2 1st Qu.:28.00 Class :character Class :character 1st Qu.: 428.8 Class :character 1st Qu.: 3.00

Median :485.5 Median :32.00 Mode :character Mode :character Median : 751.0 Mode :character Median : 9.00

Mean :462.6 Mean :33.79 Mean : 784.3 Mean :10.96

3rd Qu.:687.5 3rd Qu.:39.00 3rd Qu.:1110.8 3rd Qu.:19.00

Max. :863.0 Max. :58.00 Max. :1496.0 Max. :29.00

Education EducationField EmployeeCount EmployeeNumber EnvironmentSatisfaction Gender HourlyRate

Min. :1.000 Length:140 Min. :1 Min. : 1.0 Min. :1.000 Length:140 Min. : 32.00

1st Qu.:2.000 Class :character 1st Qu.:1 1st Qu.: 483.2 1st Qu.:1.000 Class :character 1st Qu.: 51.00

Median :3.000 Mode :character Median :1 Median :1021.5 Median :3.000 Mode :character Median : 68.50

Mean :2.786 Mean :1 Mean : 998.4 Mean :2.507 Mean : 67.29

3rd Qu.:3.250 3rd Qu.:1 3rd Qu.:1508.5 3rd Qu.:4.000 3rd Qu.: 84.00

Max. :5.000 Max. :1 Max. :2027.0 Max. :4.000 Max. :100.00

JobInvolvement JobLevel JobRole JobSatisfaction MaritalStatus MonthlyIncome MonthlyRate

Min. :1.000 Min. :1.000 Length:140 Min. :1.000 Length:140 Min. : 1081 Min. : 2396

1st Qu.:2.000 1st Qu.:1.000 Class :character 1st Qu.:1.000 Class :character 1st Qu.: 2342 1st Qu.: 8054

Median :3.000 Median :1.000 Mode :character Median :3.000 Mode :character Median : 3171 Median :12651

Mean :2.421 Mean :1.636 Mean :2.436 Mean : 4765 Mean :13624

3rd Qu.:3.000 3rd Qu.:2.000 3rd Qu.:3.000 3rd Qu.: 5839 3rd Qu.:19498

Max. :4.000 Max. :5.000 Max. :4.000 Max. :19859 Max. :26959

NumCompaniesWorked Over18 OverTime PercentSalaryHike PerformanceRating RelationshipSatisfaction StandardHours

Min. :0.000 Length:140 Length:140 Min. :11.00 Min. :3.000 Min. :1.000 Min. :80

1st Qu.:1.000 Class :character Class :character 1st Qu.:12.00 1st Qu.:3.000 1st Qu.:1.750 1st Qu.:80

Median :1.000 Mode :character Mode :character Median :14.00 Median :3.000 Median :3.000 Median :80

Mean :3.079 Mean :15.33 Mean :3.164 Mean :2.607 Mean :80

3rd Qu.:5.000 3rd Qu.:18.00 3rd Qu.:3.000 3rd Qu.:4.000 3rd Qu.:80

Max. :9.000 Max. :25.00 Max. :4.000 Max. :4.000 Max. :80

StockOptionLevel TotalWorkingYears TrainingTimesLastYear WorkLifeBalance YearsAtCompany YearsInCurrentRole YearsSinceLastPromotion

Min. :0.0000 Min. : 0.000 Min. :0.00 Min. :1.000 Min. : 0.000 Min. : 0.000 Min. : 0.000

1st Qu.:0.0000 1st Qu.: 3.000 1st Qu.:2.00 1st Qu.:2.000 1st Qu.: 1.000 1st Qu.: 0.000 1st Qu.: 0.000

Median :0.0000 Median : 6.500 Median :2.50 Median :3.000 Median : 3.000 Median : 2.000 Median : 1.000

Mean :0.4929 Mean : 8.186 Mean :2.65 Mean :2.636 Mean : 5.193 Mean : 2.907 Mean : 2.136

3rd Qu.:1.0000 3rd Qu.:10.000 3rd Qu.:3.00 3rd Qu.:3.000 3rd Qu.: 8.000 3rd Qu.: 4.000 3rd Qu.: 2.000

Max. :3.0000 Max. :40.000 Max. :6.00 Max. :4.000 Max. :40.000 Max. :15.000 Max. :15.000

YearsWithCurrManager

Min. : 0.000

1st Qu.: 0.000

Median : 2.000

Mean : 2.943

3rd Qu.: 6.000

Max. :14.000

> notworking$Attrition <- as.numeric(notworking$Attrition)

> notworking$BusinessTravel <- as.numeric(notworking$BusinessTravel)

> notworking$Department <- as.numeric(notworking$Department)

> notworking$EducationField <- as.numeric(notworking$EducationField)

> notworking$Gender <- as.numeric(notworking$Gender)

> notworking$JobRole <- as.numeric(notworking$JobRole)

> notworking$MaritalStatus <- as.numeric(notworking$MaritalStatus)

> notworking$Over18 <- as.numeric(notworking$Over18)

> notworking$OverTime <- as.numeric(notworking$OverTime)

> summary(notworking)

ID Age Attrition BusinessTravel DailyRate Department DistanceFromHome Education

Min. : 28.0 Min. :18.00 Min. :1 Min. :0.000 Min. : 103.0 Min. :0.0000 Min. : 1.00 Min. :1.000

1st Qu.:259.2 1st Qu.:28.00 1st Qu.:1 1st Qu.:1.000 1st Qu.: 428.8 1st Qu.:0.0000 1st Qu.: 3.00 1st Qu.:2.000

Median :485.5 Median :32.00 Median :1 Median :1.000 Median : 751.0 Median :1.0000 Median : 9.00 Median :3.000

Mean :462.6 Mean :33.79 Mean :1 Mean :1.171 Mean : 784.3 Mean :0.6214 Mean :10.96 Mean :2.786

3rd Qu.:687.5 3rd Qu.:39.00 3rd Qu.:1 3rd Qu.:1.250 3rd Qu.:1110.8 3rd Qu.:1.0000 3rd Qu.:19.00 3rd Qu.:3.250

Max. :863.0 Max. :58.00 Max. :1 Max. :2.000 Max. :1496.0 Max. :2.0000 Max. :29.00 Max. :5.000

EducationField EmployeeCount EmployeeNumber EnvironmentSatisfaction Gender HourlyRate JobInvolvement

Min. :0.000 Min. :1 Min. : 1.0 Min. :1.000 Min. :0.0000 Min. : 32.00 Min. :1.000

1st Qu.:1.000 1st Qu.:1 1st Qu.: 483.2 1st Qu.:1.000 1st Qu.:0.0000 1st Qu.: 51.00 1st Qu.:2.000

Median :1.000 Median :1 Median :1021.5 Median :3.000 Median :0.0000 Median : 68.50 Median :3.000

Mean :1.729 Mean :1 Mean : 998.4 Mean :2.507 Mean :0.3786 Mean : 67.29 Mean :2.421

3rd Qu.:2.000 3rd Qu.:1 3rd Qu.:1508.5 3rd Qu.:4.000 3rd Qu.:1.0000 3rd Qu.: 84.00 3rd Qu.:3.000

Max. :5.000 Max. :1 Max. :2027.0 Max. :4.000 Max. :1.0000 Max. :100.00 Max. :4.000

JobLevel JobRole JobSatisfaction MaritalStatus MonthlyIncome MonthlyRate NumCompaniesWorked Over18

Min. :1.000 Min. :0.000 Min. :1.000 Min. :0.0000 Min. : 1081 Min. : 2396 Min. :0.000 Min. :1

1st Qu.:1.000 1st Qu.:1.000 1st Qu.:1.000 1st Qu.:0.0000 1st Qu.: 2342 1st Qu.: 8054 1st Qu.:1.000 1st Qu.:1

Median :1.000 Median :2.000 Median :3.000 Median :0.5000 Median : 3171 Median :12651 Median :1.000 Median :1

Mean :1.636 Mean :2.143 Mean :2.436 Mean :0.5857 Mean : 4765 Mean :13624 Mean :3.079 Mean :1

3rd Qu.:2.000 3rd Qu.:3.000 3rd Qu.:3.000 3rd Qu.:1.0000 3rd Qu.: 5839 3rd Qu.:19498 3rd Qu.:5.000 3rd Qu.:1

Max. :5.000 Max. :8.000 Max. :4.000 Max. :2.0000 Max. :19859 Max. :26959 Max. :9.000 Max. :1

OverTime PercentSalaryHike PerformanceRating RelationshipSatisfaction StandardHours StockOptionLevel TotalWorkingYears

Min. :0.0000 Min. :11.00 Min. :3.000 Min. :1.000 Min. :80 Min. :0.0000 Min. : 0.000

1st Qu.:0.0000 1st Qu.:12.00 1st Qu.:3.000 1st Qu.:1.750 1st Qu.:80 1st Qu.:0.0000 1st Qu.: 3.000

Median :1.0000 Median :14.00 Median :3.000 Median :3.000 Median :80 Median :0.0000 Median : 6.500

Mean :0.5714 Mean :15.33 Mean :3.164 Mean :2.607 Mean :80 Mean :0.4929 Mean : 8.186

3rd Qu.:1.0000 3rd Qu.:18.00 3rd Qu.:3.000 3rd Qu.:4.000 3rd Qu.:80 3rd Qu.:1.0000 3rd Qu.:10.000

Max. :1.0000 Max. :25.00 Max. :4.000 Max. :4.000 Max. :80 Max. :3.0000 Max. :40.000

TrainingTimesLastYear WorkLifeBalance YearsAtCompany YearsInCurrentRole YearsSinceLastPromotion YearsWithCurrManager

Min. :0.00 Min. :1.000 Min. : 0.000 Min. : 0.000 Min. : 0.000 Min. : 0.000

1st Qu.:2.00 1st Qu.:2.000 1st Qu.: 1.000 1st Qu.: 0.000 1st Qu.: 0.000 1st Qu.: 0.000

Median :2.50 Median :3.000 Median : 3.000 Median : 2.000 Median : 1.000 Median : 2.000

Mean :2.65 Mean :2.636 Mean : 5.193 Mean : 2.907 Mean : 2.136 Mean : 2.943

3rd Qu.:3.00 3rd Qu.:3.000 3rd Qu.: 8.000 3rd Qu.: 4.000 3rd Qu.: 2.000 3rd Qu.: 6.000

Max. :6.00 Max. :4.000 Max. :40.000 Max. :15.000 Max. :15.000 Max. :14.000

> hist(working$BusinessTravel)

Error in hist.default(working$BusinessTravel) : 'x' must be numeric

> hist(working$BusinessTravel)

Error in hist.default(working$BusinessTravel) : 'x' must be numeric

> hist(notworking$BusinessTravel)

> summary(notworking$BusinessTravel)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 1.000 1.000 1.171 1.250 2.000

>

>

> hist(notworking$DailyRate)

> summary(notworking$DailyRate)

Min. 1st Qu. Median Mean 3rd Qu. Max.

103.0 428.8 751.0 784.3 1110.8 1496.0

>

>

> hist(notworking$Department)

> summary(notworking$Department)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.0000 0.0000 1.0000 0.6214 1.0000 2.0000

>

>

> hist(notworking$DistanceFromHome)

> summary(notworking$DistanceFromHome)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.00 3.00 9.00 10.96 19.00 29.00

>

>

> hist(notworking$Education)

> summary(notworking$Education)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 2.000 3.000 2.786 3.250 5.000

>

>

> hist(notworking$EducationField)

> summary(notworking$EducationField)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 1.000 1.000 1.729 2.000 5.000

>

>

> hist(notworking$EmployeeNumber)

> summary(notworking$EmployeeNumber)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.0 483.2 1021.5 998.4 1508.5 2027.0

>

>

> hist(notworking$EnvironmentSatisfaction)

> summary(notworking$EnvironmentSatisfaction)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 1.000 3.000 2.507 4.000 4.000

>

>

> hist(notworking$Gender)

> summary(notworking$Gender)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.0000 0.0000 0.0000 0.3786 1.0000 1.0000

>

>

> hist(notworking$HourlyRate)

> summary(notworking$HourlyRate)

Min. 1st Qu. Median Mean 3rd Qu. Max.

32.00 51.00 68.50 67.29 84.00 100.00

>

>

> hist(notworking$JobInvolvement)

> summary(notworking$JobInvolvement)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 2.000 3.000 2.421 3.000 4.000

>

>

> hist(notworking$JobLevel)

> summary(notworking$JobLevel)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 1.000 1.000 1.636 2.000 5.000

>

>

> hist(notworking$JobRole)

> summary(notworking$JobRole)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 1.000 2.000 2.143 3.000 8.000

>

>

> hist(notworking$JobSatisfaction)

> summary(notworking$JobSatisfaction)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 1.000 3.000 2.436 3.000 4.000

>

>

> hist(notworking$MaritalStatus)

> summary(notworking$MaritalStatus)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.0000 0.0000 0.5000 0.5857 1.0000 2.0000

>

>

> hist(notworking$MonthlyIncome)

> summary(notworking$MonthlyIncome)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1081 2342 3171 4765 5839 19859

>

>

> hist(notworking$MonthlyRate)

> summary(notworking$MonthlyRate)

Min. 1st Qu. Median Mean 3rd Qu. Max.

2396 8054 12651 13624 19498 26959

>

>

> hist(notworking$NumCompaniesWorked)

> summary(notworking$NumCompaniesWorked)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 1.000 1.000 3.079 5.000 9.000

>

>

> hist(notworking$OverTime)

> summary(notworking$OverTime)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.0000 0.0000 1.0000 0.5714 1.0000 1.0000

>

>

> hist(notworking$PercentSalaryHike)

> summary(notworking$PercentSalaryHike)

Min. 1st Qu. Median Mean 3rd Qu. Max.

11.00 12.00 14.00 15.33 18.00 25.00

>

>

> hist(notworking$PerformanceRating)

> summary(notworking$PerformanceRating)

Min. 1st Qu. Median Mean 3rd Qu. Max.

3.000 3.000 3.000 3.164 3.000 4.000

>

>

> hist(notworking$RelationshipSatisfaction)

> summary(notworking$RelationshipSatisfaction)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 1.750 3.000 2.607 4.000 4.000

>

>

> hist(notworking$StockOptionLevel)

> summary(notworking$StockOptionLevel)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.0000 0.0000 0.0000 0.4929 1.0000 3.0000

>

>

> hist(notworking$TotalWorkingYears)

> summary(notworking$TotalWorkingYears)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 3.000 6.500 8.186 10.000 40.000

>

>

> hist(notworking$TrainingTimesLastYear)

> summary(notworking$TrainingTimesLastYear)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.00 2.00 2.50 2.65 3.00 6.00

>

>

> hist(notworking$WorkLifeBalance)

> summary(notworking$WorkLifeBalance)

Min. 1st Qu. Median Mean 3rd Qu. Max.

1.000 2.000 3.000 2.636 3.000 4.000

>

>

> hist(notworking$YearsAtCompany)

> summary(notworking$YearsAtCompany)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 1.000 3.000 5.193 8.000 40.000

>

>

> hist(notworking$YearsInCurrentRole)

> summary(notworking$YearsInCurrentRole)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 0.000 2.000 2.907 4.000 15.000

>

>

> hist(notworking$YearsSinceLastPromotion)

> summary(notworking$YearsSinceLastPromotion)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 0.000 1.000 2.136 2.000 15.000

>

>

> hist(notworking$YearsWithCurrManager)

> summary(notworking$YearsWithCurrManager)

Min. 1st Qu. Median Mean 3rd Qu. Max.

0.000 0.000 2.000 2.943 6.000 14.000

>