**Appendix**

> library(readxl)

> Crime <- read\_excel("Documents/Accunique/6--3750/Crime.xlsx")

> View(Crime)

> install.packages("psych")

Content type 'application/x-gzip' length 4108244 bytes (3.9 MB)

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downloaded 3.9 MB

The downloaded binary packages are in

/var/folders/8x/1t322wrs0p74919z52yh4fkw0000gn/T//RtmpG4wf56/downloaded\_packages

> library(psych)

The following objects are masked from ‘package:ggplot2’:

%+%, alpha

> install.packages("plyr")

Content type 'application/x-gzip' length 1012642 bytes (988 KB)

==================================================

downloaded 988 KB

The downloaded binary packages are in

/var/folders/8x/1t322wrs0p74919z52yh4fkw0000gn/T//RtmpG4wf56/downloaded\_packages

> library(plyr)

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You have loaded plyr after dplyr - this is likely to cause problems.

If you need functions from both plyr and dplyr, please load plyr first, then dplyr:

library(plyr); library(dplyr)

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

arrange, count, desc, failwith, id, mutate, rename, summarise, summarize

> table(Crime$`0 time?`)

0 1

1509 165

> less\_than\_1 <- length(which(Crime$`Years Lost`<= 1))

> less\_than\_1

[1] 364

> more\_than\_1 <- length(which(Crime$`Years Lost`> 1))

> more\_than\_1

[1] 1536

> table(Crime$Race)

Asian Back Black caucasian Caucasian

13 1 920 1 722

Hispanic Native American Other

222 12 9

> plot(table(Crime$Race))

> barplot(table(Crime$Race))

> table(Crime$Sex)

Female Male

180 1720

> barplot(table(Crime$Sex))

> df\_race <- data.frame(Crime$`0 time?`, Crime$Race)

> head(df\_race)

Crime..0.time.. Crime.Race

1 0 Black

2 0 Black

3 0 Caucasian

4 1 Caucasian

5 0 Caucasian

6 0 Caucasian

> new\_df\_race <- df\_race %>% filter(Crime..0.time..<1)

> head(new\_df\_race)

Crime..0.time.. Crime.Race

1 0 Black

2 0 Black

3 0 Caucasian

4 0 Caucasian

5 0 Caucasian

6 0 Black

> table(new\_df\_race)

Crime.Race

Crime..0.time.. Asian Back Black caucasian Caucasian Hispanic Native American Other

0 9 1 781 1 533 171 6 77

> df\_gender <- data.frame(Crime$`0 time?`, Crime$Sex)

> head(df\_gender)

Crime..0.time.. Crime.Sex

1 0 Male

2 0 Male

3 0 Male

4 1 Male

5 0 Male

6 0 Male

> new\_df\_gender <- df\_gender %>% filter(Crime..0.time..<1)

> table(new\_df\_gender)

Crime.Sex

Crime..0.time.. Female Male

1. 113 1396

> df\_race\_yearlost <- data.frame(Crime$`Years Lost`, Crime$Race)

> head(df\_race\_yearlost)

Crime..Years.Lost. Crime.Race

1 1.7 Black

2 0.1 Black

3 19.5 Caucasian

4 0.0 Caucasian

5 2.6 Caucasian

6 5.7 Caucasian

> head(table(df\_race\_yearlost))

Crime.Race

Crime..Years.Lost. Asian Back Black caucasian Caucasian Hispanic Native American Other

0 2 0 56 0 85 37 2 1

0.1 1 0 18 0 10 5 0 0

0.2 0 0 16 0 8 4 0 0

0.3 1 0 13 0 8 1 0 0

0.4 0 0 7 0 8 1 0 0

0.5 0 0 9 0 8 1 0 0

> colMeans(table(df\_race\_yearlost))

Asian Back Black caucasian Caucasian Hispanic Native American

0.042763158 0.003289474 3.026315789 0.003289474 2.375000000 0.730263158 0.039473684

Other

0.029605263

> df\_gender\_yearlost <- data.frame(Crime$`Years Lost`, Crime$Sex)

> head(df\_gender\_yearlost)

Crime..Years.Lost. Crime.Sex

1 1.7 Male

2 0.1 Male

3 19.5 Male

4 0.0 Male

5 2.6 Male

6 5.7 Male

> head(table(df\_gender\_yearlost))

Crime.Sex

Crime..Years.Lost. Female Male

0 50 133

0.1 6 28

0.2 5 23

0.3 3 20

0.4 4 12

0.5 2 16

> colMeans(table(df\_gender\_yearlost))

Female Male

0.5921053 5.6578947