**MBA Salaries**

**Output**

1. summary(mba.df)

age sex gmat\_tot gmat\_qpc

Min. :22.00 Min. :1.000 Min. :450.0 Min. :28.00

1st Qu.:25.00 1st Qu.:1.000 1st Qu.:580.0 1st Qu.:72.00

Median :27.00 Median :1.000 Median :620.0 Median :83.00

Mean :27.36 Mean :1.248 Mean :619.5 Mean :80.64

3rd Qu.:29.00 3rd Qu.:1.000 3rd Qu.:660.0 3rd Qu.:93.00

Max. :48.00 Max. :2.000 Max. :790.0 Max. :99.00

gmat\_vpc gmat\_tpc s\_avg f\_avg quarter

Min. :16.00 Min. : 0.0 Min. :2.000 Min. :0.000 Min. :1.000

1st Qu.:71.00 1st Qu.:78.0 1st Qu.:2.708 1st Qu.:2.750 1st Qu.:1.250

Median :81.00 Median :87.0 Median :3.000 Median :3.000 Median :2.000

Mean :78.32 Mean :84.2 Mean :3.025 Mean :3.062 Mean :2.478

3rd Qu.:91.00 3rd Qu.:94.0 3rd Qu.:3.300 3rd Qu.:3.250 3rd Qu.:3.000

Max. :99.00 Max. :99.0 Max. :4.000 Max. :4.000 Max. :4.000

work\_yrs frstlang salary satis

Min. : 0.000 Min. :1.000 Min. : 0 Min. : 1.0

1st Qu.: 2.000 1st Qu.:1.000 1st Qu.: 0 1st Qu.: 5.0

Median : 3.000 Median :1.000 Median : 999 Median : 6.0

Mean : 3.872 Mean :1.117 Mean : 39026 Mean :172.2

3rd Qu.: 4.000 3rd Qu.:1.000 3rd Qu.: 97000 3rd Qu.: 7.0

Max. :22.000 Max. :2.000 Max. :220000 Max. :998.0

2. mytable <- xtabs(~placed$salary+placed$sex+placed$gmat\_tot+placed$work\_yrs+placed$s\_avg, data=placed)

ftable(mytable) # print table

summary(mytable) # chi-square test of indepedence

Call: xtabs(formula = ~placed$salary + placed$sex + placed$gmat\_tot +

placed$work\_yrs + placed$s\_avg, data = placed)

Number of cases in table: 271

Number of factors: 5

Test for independence of all factors:

Chisq = 2321002, df = 1707353, p-value = 0

Chi-squared approximation may be incorrect

3. t.test(placed$salary+placed$s\_avg)

One Sample t-test

data: placed$salary + placed$s\_avg

t = 12.62, df = 270, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

33005.60 45207.39

sample estimates:

mean of x

39106.49

4. t.test(placed$salary+placed$gmat\_tot)

One Sample t-test

data: placed$salary + placed$gmat\_tot

t = 12.82, df = 270, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

33622.08 45823.08

sample estimates:

mean of x

39722.58

5. t.test(placed$salary+placed$s\_avg)

One Sample t-test

data: placed$salary + placed$s\_avg

t = 12.62, df = 270, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

33005.60 45207.39

sample estimates:

mean of x

39106.49

6. t.test(placed$salary+placed$work\_yrs)

One Sample t-test

data: placed$salary + placed$work\_yrs

t = 12.62, df = 270, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

33006.49 45208.28

sample estimates:

mean of x

39107.38

7. t.test(placed$salary+placed$sex)

One Sample t-test

data: placed$salary + placed$sex

t = 12.619, df = 270, p-value < 2.2e-16

alternative hypothesis: true mean is not equal to 0

95 percent confidence interval:

33003.83 45205.61

sample estimates:

mean of x

39104.72

8. ffitstartingsalaries <- lm(placed$salary~placed$sex+placed$frstlang+placed$gmat\_tot+placed$s\_avg+placed$f\_avg+placed$quarter)

> coef(fitstartingsalaries)

(Intercept) placed$sex placed$frstlang placed$gmat\_tot placed$s\_avg

89598.80350 5161.43379 -10841.24078 -69.22355 10853.68030

placed$f\_avg placed$quarter

-6771.09504 -5686.14218

9. notplaced <- mba.df[ which(mba.df$work\_yrs==0), ]

mytable2 <- xtabs(~notplaced$salary+notplaced$sex+notplaced$gmat\_tot+notplaced$work\_yrs+notplaced$s\_avg, data=notplaced)

ftable(mytable2) # print table

summary(mytable2) # chi-square test of indepedence

Call: xtabs(formula = ~notplaced$salary + notplaced$sex + notplaced$gmat\_tot +

notplaced$work\_yrs + notplaced$s\_avg, data = notplaced)

Number of cases in table: 3

Number of factors: 5

Test for independence of all factors:

Chisq = 24, df = 20, p-value = 0.2424

Chi-squared approximation may be incorrect

10. fitstartingsalaries <- lm(placed$salary~placed$sex+placed$frstlang+placed$gmat\_tot+placed$s\_avg+placed$f\_avg+placed$quarter)

> coef(fitstartingsalaries)

(Intercept) placed$sex placed$frstlang placed$gmat\_tot placed$s\_avg

89598.80350 5161.43379 -10841.24078 -69.22355 10853.68030

placed$f\_avg placed$quarter

-6771.09504 -5686.14218

11. fitstartingsalariesnotplaced <- lm(notplaced$salary~notplaced$sex+notplaced$frstlang+notplaced$gmat\_tot+notplaced$s\_avg+notplaced$f\_avg+notplaced$quarter)

> coef(fitstartingsalariesnotplaced)

(Intercept) notplaced$sex notplaced$frstlang notplaced$gmat\_tot

1427679.833 NA -283002.000 -1566.683

notplaced$s\_avg notplaced$f\_avg notplaced$quarter

NA NA NA