> a <- matrix(data = 1:9, nrow = 3, ncol = 3)

> a

[,1] [,2] [,3]

[1,] 1 4 7

[2,] 2 5 8

[3,] 3 6 9

> b <- matrix(data = a^2, nrow = 3, ncol = 3)

> b

[,1] [,2] [,3]

[1,] 1 16 49

[2,] 4 25 64

[3,] 9 36 81

> trans\_b <- t(b)

> trans\_b

[,1] [,2] [,3]

[1,] 1 4 9

[2,] 16 25 36

[3,] 49 64 81

> Storrs <- c(365, 489)

> Hartford <- c(426, 387)

> Stamford <- c(571, 486)

> HP\_vector <- c(Storrs, Hartford, Stamford)

> HP\_vector

[1] 365 489 426 387 571 486

> HP\_matrix <- matrix(data = HP\_vector, nrow = 3, byrow = TRUE)

> HP\_matrix

[,1] [,2]

[1,] 365 489

[2,] 426 387

[3,] 571 486

> Area <- c("Storrs", "Hartford", "Stamford")

> type <- c("House", "Condo")

> colnames(HP\_matrix) <- type

> rownames(HP\_matrix) <- Area

> CT\_average <- colMeans(HP\_matrix)

> HP\_matrix.2 <- rbind(HP\_matrix, CT\_average)

> HP\_matrix.f <- rowMeans(HP\_matrix.2)

> Income <- rchisq(100, 5)

> yrsofedu <- sample(7:16, 100, replace = TRUE)

> CT <- cbind(Income, yrsofedu) #or CT <- matrix(c(Income, yrsofedu), 100, 2)

> gender <- sample(c("Male", "Female"), 100, replace =TRUE)

> CT1 <- CT[gender == "Female", ] #or CT1 <- CT[gender, ] (Leaves out entries with FALSE values)

> CT2 <- CT[yrsofedu > 12, ]

> CT1\_mean <- colMeans(CT1) # or mean(CT1[,1])

> CT1\_mean

Income yrsofedu

4.806865 12.018868

> CT2\_mean <- colMeans(CT2) # or mean(CT2[,1])

> CT2\_mean

Income yrsofedu

5.224082 14.642857