```r
wd <- "~/Dropbox/Coursework/Winter2017/STAT230/"
dat1 <- read.csv(paste(wd, "Data/Assignment1.csv"), row.names = 1)

## Warning in file(file, "rt"):  cannot open file '/home/dustin/Dropbox/Coursework/Winter2(
Data/Assignment1.csv':  No such file or directory
## Error in file(file, "rt"):  cannot open the connection

X <- as.matrix(dat1[, 1:5])

## Error in as.matrix(dat1[, 1:5]):  object 'dat1' not found

y <- as.matrix(dat1$y)

## Error in as.matrix(dat1$y):  object 'dat1' not found
```

Problem 1

```r
source(paste(wd, "Code/gram_schmidt.R"))

## Warning in file(filename, "r", encoding = encoding):  cannot open file '/home/dustin/Dro
Code/gram_schmidt.R': No such file or directory
## Error in file(filename, "r", encoding = encoding):  cannot open the connection

QR <- gram_schmidt(X)

## Error in eval(expr, envir, enclos):  could not find function "gram_schmidt"

beta <- solve(QR$R) %*% t(QR$Q) %*% y

## Error in solve(QR$R): object 'QR' not found

print(beta)

## function (a, b)
## .Internal(beta(a, b))
## <bytecode: 0x26a6748>
## <environment: namespace:base>
```

```r
# (b) Householder
source(paste(wd, "Code/householder.R"))

## Warning in file(filename, "r", encoding = encoding):  cannot open file '/home/dustin/Dro
Code/householder.R': No such file or directory
## Error in file(filename, "r", encoding = encoding):  cannot open the connection

QR <- householder(X)

## Error in eval(expr, envir, enclos):  could not find function "householder"

beta <- solve(QR$R) %*% t(QR$Q) %*% y
```

Problem 1 continued on next page...

```
## Error in solve(QR$R): object 'QR' not found

beta

## function (a, b)
## .Internal(beta(a, b))
## <bytecode: 0x26a6748>
## <environment: namespace:base>
```

```
# (c) Jacobi
source(paste(wd, "Code/jacobi.R"))

## Warning in file(filename, "r", encoding = encoding):  cannot open file '/home/dustin/Dr
## Code/jacobi.R': No such file or directory
## Error in file(filename, "r", encoding = encoding):  cannot open the connection

beta <- jacobi(t(X) %*% X, rep(1, 5), t(X) %*% y)

## Error in eval(expr, envir, enclos):  could not find function "jacobi"

print(beta)

## function (a, b)
## .Internal(beta(a, b))
## <bytecode: 0x26a6748>
## <environment: namespace:base>
```

```
# Verify values using lm()
fit <- lm(y ~ . - 1, data = dat1)

## Error in is.data.frame(data):  object 'dat1' not found

print(fit$coefficients)

## Error in print(fit$coefficients):  object 'fit' not found
```

Problem 2