

# In Class Assignment 4

Taylor Eckert

September 6, 2018

1.)

## For Loop

```
x<- 1
print(x)
acc<- 0
xold <- 0
for (i in 1:14){
  acc <- xold + x xold <- x x <- acc print(x)
}
```

## While Loop

```
x<- 1
print(x)
acc<- 0
xold <- 0
while(x <= 377){
  acc <- xold +x xold <- x x <- acc print(x)
}
```

## Repeat Loop

```
x<- 1
print(x)
acc<- 0
xold <- 0
repeat{
  acc <- xold +x xold <- x x <- acc print(x) if(x == 610)
  { break }
}
```

## 2.)

```
X <- 50
Y <- 2
mymat <- matrix(rnorm(100, mean = X, sd = Y), 10, 10)
print(mymat)
apply(mymat, 1, FUN = mean)
# Mean by row
apply(mymat, 2, FUN = mean)
# Mean by column
apply(mymat, 1, FUN = sd) # Std. Deviation by row
apply(mymat, 2, FUN = sd) # Std. Deviation by column
```

## 3.)

### a.)

```
TitanicSex <- apply(Titanic, 2, FUN = sum) print (TitanicSex)
```

### b.)

```
apply(Titanic, c(2,4), FUN = sum)
```

### c.)

```
apply(Titanic, c(2:3), FUN = sum)
```