

### Question 1

- d) Based on the BMO profile, we get 36-Month Beta is 1.17. From part c, my estimate of beta for BMO is 1.1192934. It is a little bit smaller than the value of Beta on the website.
- e) The BMO stock is more volatile than the market.
  - i) Using confint function, we get the 95% confidence interval is [0.8569112, 1.381676]

# e)

# i)

```
confint(model, "xi", 0.95)
```

- ii) Based on the confidence interval provided in lessons, we have [0.8569112, 1.381676].

# ii)

```
betahat <- 1.1192934
```

```
df <- 59 - 2
```

```
t <- qt(1-0.05/2, df)
```

```
se <- 0.1310296
```

```
ub <- betahat + t*se
```

```
lb <- betahat - t*se
```

```
ub
```

```
lb
```