-5 sentiments 99

-4 sentiments 474

-3 sentiments 641

-2 sentiments 1050

-1 sentiments 1549

0 sentiments 0

1 sentiments 1174

2 sentiments 1749

3 sentiments 1376

4 sentiments 276

5 sentiments 2

(-5)(99)+(-4)(474)+(-3)(641)+(-2)(1050)+(-1)(1549)+(0)(0)+(1)(1174)+(2)(1749)+(3)(1376)+(4)(276)+(5)(2)

/

99+474+641+1050+1549+0+1174+1749+1376+276+2

Equals

-495+-1896+-1923+-2100+-1549+1174+3498+4128+1104+10

/-5 sentiments 99

-4 sentiments 474

-3 sentiments 641

-2 sentiments 1050

-1 sentiments 1549

0 sentiments 0

1 sentiments 1174

2 sentiments 1749

3 sentiments 1376

4 sentiments 276

5 sentiments 2

8390

Equals

1951/8390 = 0.2325

Now I want to try this in R. I will first try and produce a data frame which mimics my output. I can probable just import the file, but I will do it manually here to get some R practice:

> mack\_value<-c(-5:5)

> mack\_value

[1] -5 -4 -3 -2 -1 0 1 2 3 4 5

> sentiments<-"Sentiments"

> sentiments

[1] "Sentiments"

> mack\_counts<-c(99,474,641,1050,1549,0,1174,1749,1376,276,2)

> mack\_counts

[1] 99 474 641 1050 1549 0 1174 1749 1376 276 2

> mack\_df<-data.frame(mack\_value,sentiments,mack\_counts)

> mack\_df

mack\_value sentiments mack\_counts

1 -5 Sentiments 99

2 -4 Sentiments 474

3 -3 Sentiments 641

4 -2 Sentiments 1050

5 -1 Sentiments 1549

6 0 Sentiments 0

7 1 Sentiments 1174

8 2 Sentiments 1749

9 3 Sentiments 1376

10 4 Sentiments 276

11 5 Sentiments 2

Ok – now that I’ve produced my data set, time to do some math to match the equation. I got a little confused here, so I made a subset that got rid of my “Sentiments” field:

> mack\_subset<-subset(mack\_df,sentiments="Sentiments",select=c(mack\_value,mack\_counts))

> mack\_subset

mack\_value mack\_counts

1 -5 99

2 -4 474

3 -3 641

4 -2 1050

5 -1 1549

6 0 0

7 1 1174

8 2 1749

9 3 1376

10 4 276

11 5 2

Calculate NumNow to erator:

1. First I need to get a multiplication of each of the two fields in my subset:
2. > mack\_num\_test <- c(mack\_subset$mack\_value\*mack\_subset$mack\_counts)

2) Then I need to sum these values to get my numerator

> mack\_numerator<-sum(mack\_num\_test)

> mack\_numerator

[1] 1951

Calculate Denominator:

> mack\_denomanator<-sum(mack\_subset$mack\_counts)

> mack\_denomanator

[1] 8390

> mack\_numerator/mack\_denomanator

[1] 0.2325387