18th March

**BI-5270**

**Sentimental Analysis: (aka Opinion Mining, Subjective Analysis)**

* Explicit-> What a wonderful day. Subjective. It’s obvious that there is a sentiment.
* Implicit-> More of a fact than of a sentiment. Objective.

Reaching to 1.

Objective: fact

Polarity: positive, negative, neutral.

Eg: wordnet.princeton.edu

* There are different ways to compute the sentiment score. There are few algorithms to compute the same as well.
* Based on the word net-> sentiwordnet was built.

**Matrix:**

> matrix(1:9,byrow=TRUE,nrow=3)

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

[1,] 1 2 3

[2,] 4 5 6

[3,] 7 8 9

> matrix(1:9,byrow=FALSE,nrow=3)

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

[1,] 1 4 7

[2,] 2 5 8

[3,] 3 6 9

> aquaman<-c(460.998,314.4)

> rambo\_returns<-c(290.475,247.90)

> alita<-c(309.3,165.8)

> box\_office\_hits<-c(aquaman,rambo\_returns,alita)

> box\_office\_hits

> movie\_matrix<-matrix(box\_office\_hits,byrow=TRUE,nrow=3)

> movie\_matrix

[,1] [,2]

[1,] 460.998 314.4

[2,] 290.475 247.9

[3,] 309.300 165.8

> movie\_title<-c("aquaman","rambo\_returns","alita")

> movie\_title

[1] "aquaman" "rambo\_returns" "alita"

> movie\_title<-c("aquaman","rambo\_returns","alita")

> region<-c("US","Non-US")

> movie\_matrix

[,1] [,2]

[1,] 460.998 314.4

[2,] 290.475 247.9

[3,] 309.300 165.8

>

> rownames(movie\_matrix)<-movie\_title

> movie\_matrix

[,1] [,2]

aquaman 460.998 314.4

rambo\_returns 290.475 247.9

alita 309.300 165.8

|  |
| --- |
| > colnames(movie\_matrix)<-region  > movie\_matrix  US Non-US  aquaman 460.998 314.4  rambo\_returns 290.475 247.9  alita 309.300 165.8 |
|  |
| |  | | --- | | > worldwide\_vector<-rowSums(movie\_matrix)  > worldwide\_vector  aquaman rambo\_returns alita  775.398 538.375 475.100  > inception<-c(123.45,678.90)  > harrypotter<-c(987.6,543.2)  >  > movie\_title\_2<-c("inception","harrypotter")  > movie\_title\_2  [1] "inception" "harrypotter"  >  > box\_office\_hits\_2<-c(inception,harrypotter)  > box\_office\_hits\_2  [1] 123.45 678.90 987.60 543.20  > movie\_matrix\_2<-matrix(box\_office\_hits\_2,byrow=TRUE,nrow=2)  > movie\_matrix\_2  [,1] [,2]  [1,] 123.45 678.9  [2,] 987.60 543.2  > rownames(movie\_matrix\_2)<-movie\_title\_2  > movie\_matrix\_2  [,1] [,2]  inception 123.45 678.9  harrypotter 987.60 543.2  >  > colnames(movie\_matrix\_2)<-region  > movie\_matrix\_2  US Non-US  inception 123.45 678.9  harrypotter 987.60 543.2  > all\_movie\_matrix<-rbind(movie\_matrix,movie\_matrix\_2)  > all\_movie\_matrix  US Non-US  aquaman 460.998 314.4  rambo\_returns 290.475 247.9  alita 309.300 165.8  inception 123.450 678.9  harrypotter 987.600 543.2  > total\_revenue<-colSums(all\_movie\_matrix)  > total\_revenue  US Non-US  2171.823 1950.200  > total\_revenue<-rowSums(all\_movie\_matrix)  > total\_revenue  aquaman rambo\_returns alita inception harrypotter  775.398 538.375 475.100 802.350 1530.800 | |