* ***Codes used for this project work:-***

Codes used to rank teams according to Zscore:-

X2017\_18\_top\_5\_league\_table <- read\_excel("C:/Users/HP/Desktop/final project/2017-18/2017-18 top 5 league table.xlsx")

View(X2017\_18\_top\_5\_league\_table)

Zscoreorder<-order(X2017\_18\_top\_5\_league\_table$Zscore,decreasing = T)

ranktable2<-X2017\_18\_top\_5\_league\_table[Zscoreorder,]

View(ranktable2)

write.csv(ranktable2,"2017-18 rank table.csv")

Codes used to rank strikers according to Zscore:-

X17\_18\_Player\_Data <- read\_excel("C:/Users/HP/Desktop/final project/2017-18/17-18 Player Data.xlsx")

View(X17\_18\_Player\_Data)

Zscoreorder<-order(X17\_18\_Player\_Data$Zscore,decreasing = T)

playerranktable2<-X17\_18\_Player\_Data[Zscoreorder,]

playerranktable2

View(playerranktable2)

write.csv(playerranktable2,"2017-18 player rank table.csv")

Codes used to find correlation matrix of teams data:-

X2017\_18\_ranktable <- read\_excel("C:/Users/HP/Desktop/final project/2017-18/2017-18 ranktable.xlsx")

View(X2017\_18\_ranktable)

u=rep(3:10)

k=X2017\_18\_ranktable[,u]

View(k)

L= cor(k)

View(L)

write.csv(L, file = "2017-18 top 5 ranktable correlation matrix.csv")

Codes used to find correlation matrix of striker’s data:-

X2017\_18\_player\_rank\_table <- read\_excel("C:/Users/HP/Desktop/final project/2017-18/2017-18 player rank table.xlsx")

View(X2017\_18\_player\_rank\_table)

u=rep(4:6)

X2017\_18\_player\_rank\_table[,u]

k=X2017\_18\_player\_rank\_table[,u]

View(k)

v=cor(k)

View(v)

write.csv(v, file = "2017-18 player rank table correlation matrix.csv" )

Codes used to rank team’s data according to PCAscore:-

X2017\_18\_top\_5\_league\_table\_PCA\_score <- read\_excel("C:/Users/HP/Desktop/final project/2017-18/2017-18 top 5 league table PCA score.xlsx")

View(X2017\_18\_top\_5\_league\_table\_PCA\_score)

PCAscoreorder<-order(X2017\_18\_top\_5\_league\_table\_PCA\_score$`PCA Score`,decreasing = T)

PCAranktable<-X2017\_18\_top\_5\_league\_table\_PCA\_score[PCAscoreorder,]

PCAranktable

View(PCAranktable)

write.csv(PCAranktable,file = "2015-16 top 5 league pca ranktable.csv")

Codes used to rank striker’s data according to PCAscore:-

X17\_18\_Player\_Data\_PCA\_score <- read\_excel("C:/Users/HP/Desktop/final project/2017-18/17-18 Player Data PCA score.xlsx")

View(X17\_18\_Player\_Data\_PCA\_score)

PCAscoreorder<-order(X17\_18\_Player\_Data\_PCA\_score$`PCA Score`,decreasing = T)

PCAranktable<-X17\_18\_Player\_Data\_PCA\_score[PCAscoreorder,]

View(PCAranktable)

write.csv(PCAranktable,file = "2017-18 player data PCA rank table.csv")

The table of Zscore and PCAscore is made by using “*Microsoft Excel 2016”.*

The Principal Component Analysis is made by using “*Minitab 21 Statistical Software”*