Statistics Project, Rajdip Banerjee(316)

#create a data frame  
data<- data.frame(  
 Name = c("Suprodip Charkarborty",  
 "Anubhab Roy",  
 "Sohan Chakravartty",  
 "Bapon Ghosh",  
 "Ritam Das",  
 "Suman Chandra Mondal",  
 "Shuvadip Das",  
 "Sohel Munshi",  
 "Kiranmay Dolui",  
 "Sudipta Manna",  
 "Arnab Ghose",  
 "Manas Mondal",  
 "MD Frioj Molla",  
 "Sumit Sing",  
 "Raktim Day",  
 "Rajdip Banerjee"  
 ),  
 Roll\_no. = c(301,  
 302,  
 303,  
 304,  
 326,  
 351,  
 309,  
 358,  
 322,  
 308,  
 334,  
 311,  
 343,  
 347,  
 356,  
 316  
 ),  
 First\_Sem\_Marks = c(8.77,  
 8.85,   
 8.31,  
 8.01,  
 8.15,  
 8.55,  
 8.22,  
 8.66,  
 8.22,  
 8.96,  
 8.66,  
 8.66,  
 8.363,  
 8.08,  
 8.23,  
 8.02  
 ),  
 Total\_HS\_Marks = c(442,   
 429 ,  
 359,  
 389,  
 452,  
 336,  
 563,  
 452,  
 452,  
 459,  
 452,  
 456,  
 456,  
 433,  
 452,  
 399  
 ),  
 Math\_HS\_Marks = c(96,  
 91,  
 92,  
 91,  
 99,  
 99,  
 96,  
 85,  
 85,  
 56,  
 86,  
 86,  
 96,  
 96,  
 96,  
 87  
 ),  
 Computer\_Science\_HS\_Marks= c(98,  
 90,  
 94,  
 99,  
 88,  
 85,  
 85,  
 100,  
 100,  
 85,  
 96,  
 96,  
 96,  
 96,  
 100,  
 93  
 )  
)  
  
#Print the data frame  
print(data)

## Name Roll\_no. First\_Sem\_Marks Total\_HS\_Marks Math\_HS\_Marks  
## 1 Suprodip Charkarborty 301 8.770 442 96  
## 2 Anubhab Roy 302 8.850 429 91  
## 3 Sohan Chakravartty 303 8.310 359 92  
## 4 Bapon Ghosh 304 8.010 389 91  
## 5 Ritam Das 326 8.150 452 99  
## 6 Suman Chandra Mondal 351 8.550 336 99  
## 7 Shuvadip Das 309 8.220 563 96  
## 8 Sohel Munshi 358 8.660 452 85  
## 9 Kiranmay Dolui 322 8.220 452 85  
## 10 Sudipta Manna 308 8.960 459 56  
## 11 Arnab Ghose 334 8.660 452 86  
## 12 Manas Mondal 311 8.660 456 86  
## 13 MD Frioj Molla 343 8.363 456 96  
## 14 Sumit Sing 347 8.080 433 96  
## 15 Raktim Day 356 8.230 452 96  
## 16 Rajdip Banerjee 316 8.020 399 87  
## Computer\_Science\_HS\_Marks  
## 1 98  
## 2 90  
## 3 94  
## 4 99  
## 5 88  
## 6 85  
## 7 85  
## 8 100  
## 9 100  
## 10 85  
## 11 96  
## 12 96  
## 13 96  
## 14 96  
## 15 100  
## 16 93

x1 <- data$First\_Sem\_Marks  
x2 <- data$Total\_HS\_Marks  
x3 <- data$Math\_HS\_Marks  
x4 <- data$Computer\_Science\_HS\_Marks  
#Summary statistic  
summary(data$First\_Sem\_Marks)

## Min. 1st Qu. Median Mean 3rd Qu. Max.   
## 8.010 8.203 8.336 8.420 8.660 8.960

summary(data$Total\_HS\_Marks)

## Min. 1st Qu. Median Mean 3rd Qu. Max.   
## 336.0 421.5 452.0 436.3 453.0 563.0

summary(data$Math\_HS\_Marks)

## Min. 1st Qu. Median Mean 3rd Qu. Max.   
## 56.00 86.00 91.50 89.81 96.00 99.00

summary(data$Computer\_Science\_HS\_Marks)

## Min. 1st Qu. Median Mean 3rd Qu. Max.   
## 85.00 89.50 96.00 93.81 98.25 100.00

fn\_mode <- function(x){  
 unique\_x <- unique(x)  
 tabulate\_x <- tabulate(match(x, unique\_x))  
 unique\_x[tabulate\_x == max(tabulate\_x)]  
}  
fn\_mode(x1)

## [1] 8.66

fn\_mode(x2)

## [1] 452

fn\_mode(x3)

## [1] 96

fn\_mode(x4)

## [1] 96

data[16,]

## Name Roll\_no. First\_Sem\_Marks Total\_HS\_Marks Math\_HS\_Marks  
## 16 Rajdip Banerjee 316 8.02 399 87  
## Computer\_Science\_HS\_Marks  
## 16 93