```
#creating histograms
 hist(supermarketdata$gross.income, main = "Gross Income", xlab = "Income", col = "light green", breaks = 20)

 hist(supermarketdata$cogs, main = "Cost of goods sold", xlab = "Cost", col = "light green", breaks = 20)

#making customer type subsets
member<-subset(supermarketdata, Customer.type=="Member")

normal<-subset(supermarketdata, Customer.type=="Normal")

#taking a sample of 250 customers
 normal<-normal[sample(1:nrow(normal),250,replace = FALSE),]

 member<-member[sample(1:nrow(member),250,replace = FALSE),]

#regression graphs
 ggscatter(normal, x="gross.income", y="cogs", add = "reg.line", conf.int = TRUE, cor.coef = TRUE, cor.method = "pearson", xlab = "Gross Income", ylab = "Cost of goods sold", col="light green", main="Correlation of gross income to cost of goods sold of normal customer purchases")

ggscatter(member, x="gross.income", y="cogs", add = "reg.line", conf.int = TRUE, cor.coef = TRUE, cor.method = "pearson", xlab = "Gross Income", ylab = "Cost of goods sold", col="light green", main="Correlation of gross income to cost of goods sold of member customer purchases")
```