#Task1-

Insurance=read.csv("C:/Users/769362/Documents/Insurance\_factor\_identification.csv", header=TRUE)

summary(Insurance)

#Task2

#scatter plot

x <- Insurance$Claims

y <- Insurance$Payment

plot(x,y, main="Main title", xlab = "Claims" , ylab = "Payment" , pch=19,frame=FALSE)

#add regression line

plot(x,y, main="Main title", xlab = "Claims" , ylab = "Payment" , pch=19,frame=FALSE)

abline(lm(y ~ x,data=Insurance),col="blue")

x1<- Insurance$Insured

y1 <- Insurance$Payment

plot(x1,y1, main="Main title", xlab = "Insured" , ylab = "Payment" , pch=19,frame=FALSE)

plot(x1,y1, main="Main title", xlab = "Insured" , ylab = "Payment" , pch=19,frame=FALSE)

abline(lm(y1 ~ x1,data=Insurance),col="blue")

#Task3

model<-lm(Insurance$Payment~.,data=Insurance)

model

summary(model)

#Task4

Zon <- Insurance$Zone

Kil <- Insurance$Kilometres

Bon <- Insurance$Bonus

aggregate(Insured~Zon+Kil+Bon,data=Insurance,mean)

aggregate(Claims~Zon+Kil+Bon,data=Insurance,mean)

aggregate(Payment~Zon+Kil+Bon,data=Insurance,mean)

#Task5

Value<-lm(Claims~Kilometres+Zone+Bonus+Make+Insured,data=Insurance)

summary(Value)