**PROJECT NO 7**

**HEALTH CARE COST ANALYSIS**

HospitalCosts <- read\_excel("C:/Users/mypc/Desktop/Simpli Learn/R/HospitalCosts.csv")

View(HospitalCosts)

summary(HospitalCosts)

AGE(HospitalCosts)

hist(HospitalCosts$AGE)

summary(as.factor(HospitalCosts$AGE))

aggregate(TOTCHG~AGE,FUN = sum,data = HospitalCosts)

max(aggregate(TOTCHG~AGE,FUN = sum,data = HospitalCosts))

which.max(summary(as.factor(HospitalCosts$APRDRG)))

diagnosiscost<-aggregate(TOTCHG~APRDRG,FUN = sum,data = HospitalCosts)

diagnosiscost

diagnosiscost[which.max(diagnosiscost$TOTCHG),]

summary(as.factor(HospitalCosts$RACE))

head(HospitalCosts)

HospitalCosts<-na.omit(HospitalCosts)

HospitalCosts$RACE<-as.factor(HospitalCosts$RACE)

HospitalCosts$RACE<-as.factor(HospitalCosts$RACE)

model<-aov(TOTCHG~RACE,data = HospitalCosts)

model

summary(model)

summary(HospitalCosts$RACE)

model1<-lm(TOTCHG~AGE+FEMALE,data = HospitalCosts)

HospitalCosts$FEMALE<-as.factor(HospitalCosts$FEMALE)

model1<-lm(TOTCHG~AGE+FEMALE,data = HospitalCosts)

summary(model1)

summary(HospitalCosts$FEMALE)

head(HospitalCosts)

HospitalCosts$RACE<-as.factor(HospitalCosts$RACE)

model2<-lm(TOTCHG~AGE+FEMALE+RACE,data = HospitalCosts)

summary(model2)

model3<-lm(TOTCHG~.,data = HospitalCosts)

summary(model3)