Exercise 3 output

>

> dis1<-matrix(c(datstu[,1],datstu[,5],as.vector(datstu[,17])),nrow(datstu),3)

> dis1\_row=c(dis1[,1])

> dis1\_col=c("id","schoolcode","jssdistrict")

> dimnames(dis1)=list(dis1\_row,dis1\_col)

> dis1\_jss<-merge(dis1,datjss,by="jssdistrict",all.dis1=TRUE)

> dis1<-merge(dis1\_jss,datsss,by="schoolcode",all.dis1\_jss=TRUE)

> dist11<-as.data.frame(sqrt((69.172\*(dis1$ssslong-dis1$point\_x)\*cos(dis1$point\_y/57.3))^2+(69.172\*(dis1$ssslat-dis1$point\_y))^2))

> # The distance between high schools of choice1 and junior high schools.

>

> dis2<-matrix(c(datstu[,1],datstu[,6],as.vector(datstu[,17])),nrow(datstu),3)

> dimnames(dis2)=list(dis1\_row,dis1\_col)

> dis2\_jss<-merge(dis2,datjss,by="jssdistrict",all.dis2=TRUE)

> dis2<-merge(dis2\_jss,datsss,by="schoolcode",all.dis2\_jss=TRUE)

> dist22<-as.data.frame(sqrt((69.172\*(dis2$ssslong-dis2$point\_x)\*cos(dis2$point\_y/57.3))^2+(69.172\*(dis2$ssslat-dis2$point\_y))^2))

> # The distance between high schools of choice2 and junior high schools.

>

> dis3<-matrix(c(datstu[,1],datstu[,7],as.vector(datstu[,17])),nrow(datstu),3)

> dimnames(dis3)=list(dis1\_row,dis1\_col)

> dis3\_jss<-merge(dis3,datjss,by="jssdistrict",all.dis3=TRUE)

> dis3<-merge(dis3\_jss,datsss,by="schoolcode",all.dis3\_jss=TRUE)

> dist33<-as.data.frame(sqrt((69.172\*(dis3$ssslong-dis3$point\_x)\*cos(dis3$point\_y/57.3))^2+(69.172\*(dis3$ssslat-dis3$point\_y))^2))

> # The distance between high schools of choice3 and junior high schools.

>

> dis4<-matrix(c(datstu[,1],datstu[,8],as.vector(datstu[,17])),nrow(datstu),3)

> dimnames(dis4)=list(dis1\_row,dis1\_col)

> dis4\_jss<-merge(dis4,datjss,by="jssdistrict",all.dis4=TRUE)

> dis4<-merge(dis4\_jss,datsss,by="schoolcode",all.dis4\_jss=TRUE)

> dist44<-as.data.frame(sqrt((69.172\*(dis4$ssslong-dis4$point\_x)\*cos(dis4$point\_y/57.3))^2+(69.172\*(dis4$ssslat-dis4$point\_y))^2))

> # The distance between high schools of choice4 and junior high schools.

>

> dis5<-matrix(c(datstu[,1],datstu[,9],as.vector(datstu[,17])),nrow(datstu),3)

> dimnames(dis5)=list(dis1\_row,dis1\_col)

> dis5\_jss<-merge(dis5,datjss,by="jssdistrict",all.dis5=TRUE)

> dis5<-merge(dis5\_jss,datsss,by="schoolcode",all.dis5\_jss=TRUE)

> dist55<-as.data.frame(sqrt((69.172\*(dis5$ssslong-dis5$point\_x)\*cos(dis5$point\_y/57.3))^2+(69.172\*(dis5$ssslat-dis5$point\_y))^2))

> # The distance between high schools of choice5 and junior high schools.

>

> dis6<-matrix(c(datstu[,1],datstu[,10],as.vector(datstu[,17])),nrow(datstu),3)

> dimnames(dis6)=list(dis1\_row,dis1\_col)

> dis6\_jss<-merge(dis6,datjss,by="jssdistrict",all.dis6=TRUE)

> dis6<-merge(dis6\_jss,datsss,by="schoolcode",all.dis6\_jss=TRUE)

> dist66<-as.data.frame(sqrt((69.172\*(dis6$ssslong-dis6$point\_x)\*cos(dis6$point\_y/57.3))^2+(69.172\*(dis6$ssslat-dis6$point\_y))^2))

> # The distance between high schools of choice6 and junior high schools

>

> dist<-cbind(dist11[,1],dist22[,1],dist33[,1],dist44[,1],dist55[,1],dist66[,1])

> # The distance between high schools of choice1-6 and students' junior high schools.