sales\_df = read.csv('C:/GitHub/HomeWork/Time\_series/final\_paper/sales\_df\_acc.csv')

biz\_list = c('분식전문점','양식음식점','일식음식점','중식음식점','치킨전문점','커피·음료','패스트푸드점','한식음식점')

sector\_list = c('골목상권','발달상권','관광특구','전통시장')

biz = biz\_list[1]

for( biz in biz\_list) {

index = sales\_df$TRDAR\_SE\_CD\_NM == sector\_list[1] & sales\_df$SVC\_INDUTY\_CD\_NM == biz

x = sales\_df$THSMON\_SELNG\_AMT[index]

x <- ts(x,frequency = 4)

x\_cmp <- decompose(x)

name = paste('C:/GitHub/HomeWork/Time\_series/final\_paper/그림/',biz,sep = '')

name = paste(name,'.jpg',sep = '')

jpeg(name)

plot(x\_cmp)

dev.off()

season\_rank = rank(x\_cmp$seasonal[1:4])

season\_sd = sd(x\_cmp$seasonal[1:4])

x\_tmp = x\_cmp$trend[21:24]

y\_tmp = c(19,20,21,22)

y\_1\_trend = lm(y\_tmp~x\_tmp)$coefficients[-1]

x\_tmp = x\_cmp$trend[13:24]

y\_tmp = c(11,12,13,14,15,16,17,18,19,20,21,22)

y\_3\_trend = lm(y\_tmp~x\_tmp)$coefficients[-1]

random\_mean = sum((x\_cmp$random[3:24])\*\*2)

random\_sd = sd(x\_cmp$random[3:24])

df = NULL

df$sr = season\_rank

df$ssd = season\_sd

df$y1trend = y\_1\_trend

df$y3trend = y\_3\_trend

df$randommean = random\_mean

df$randomsd =random\_sd

link = paste('C:/GitHub/HomeWork/Time\_series/final\_paper/ts\_r/',biz,sep = '')

link = paste(link,'.csv',sep = '')

write.csv(df,link,row.names=FALSE)}