##Q2

myvector<-c(0.1,0.6,33.8,1.9,9.6,4.3,33.7,0.3,0.0,0.1)

mean(myvector)

sd(myvector)

for(i in seq\_along(myvector))

{

if(myvector[i]==max(myvector))

{

print(paste("The highest rainfall is on day",i,sep=' '))

}

}

##Q3

x<-runif(100,0,1)

m<-matrix(x,10,10)

m

#(i)

rmean<-rowMeans(m)

rmean

colmean<-colMeans(m)

colmean

#(ii)

sum<-sum(diag(m))

sum

#(iii)

sd(m)

##Q4

P<-c("person\_1","person\_2","person\_3","person\_4","person\_5","person\_6","person\_7","person\_8")

I<-c(10000,14000,24000,43000,12323,13414,43212,36000)

low\_risk=character(0)

high\_risk=character(0)

for(i in 1:8)

{

if(I[i]<30000)

{

high\_risk=c(high\_risk,P[i])

}

else

{

low\_risk=c(low\_risk,P[i])

}

}

low\_risk

high\_risk

##Q5

X<-c(TRUE,FALSE,FALSE,TRUE)

Y<-c(FALSE,TRUE,FALSE,TRUE)

print(X & Y)

j<-TRUE

for(i in X)

{

j<-j||i

}

print(j)

##Q6

data(iris)

head(iris,3)

dim(iris)

summary(iris)

names(iris)

x<-iris

class(x)

x[3,4]

x[3,1:4]

##Q7

AMOUNT<-c(90,50,100,40,20,38)

CHEMICAL<-c("c1","c2","c3","c4","c5","c6")

colors<-c("green","red","blue","orange","pink","yellow")

pie(AMOUNT,label=CHEMICAL,col=colors,init.angle=180)

##Q8 ERROR

x<-1

while(x<-7){

if(x<-3){

print("Four is greater than three")

}

else if(x<-4){

print("next")

}

else {

print("Three is greater than two ")

}

x<-x+1

}

##Q9 ERROR

n<-scan()

n

s<-0.0

for(i in 1:n){

if(i<n){

cat("1/",i,"+")

s=s+1/i

}

if(i==n){

cat("1/",i)

s=s+1/i

}

}

cat("sum",s)

##Q10

a=0

b=0

for(i in 1:3){

a=a+1

for(j in 1:4){

b=b+1

if(j==2){

break

}

}

}

print(a)

print(b)

##Q11

stud\_id<-c(1,2,3,4,5,6,7,8,9,10)

age<-c(21,19,20,18,19,19,18,20,19,20)

pointer<-c(8,9,8,9,8,8,8,7,9,8)

dept<-c("MCA","MCA","MCA","MCA","MCA","MCA","MCA","MCA","MCA","MCA")

#(i)

studentdata<-data.frame(stud\_id,age,pointer,dept)

studentdata

for(i in studentdata){

print(i)

}

#(ii)

studentdata[studentdata==19]<-18

studentdata

#(iii)

similar to second part