**R CODE of ASSIGNMENT-3**

SELECTING MA(1) MODEL FOR PLOTTING ACF AND PACF

**CODE:**

S<-1

X=rnorm(1000,mean=0,sd=S)

y=NULL

mu<-10

theta<-0.7

for(i in 2:1000)

{

y[i-1]<-mu+X[i-1]+theta\*X[i] #MA(1) MODEL

}

ma1=ts(y)

acf\_coeff=(acf(ma1,main='ACF of a MA(1) process'))

pacf\_coeff=(pacf(ma1,main='PACF of a MA(1) process'))

acf\_coeff #AUTOCORRELATION COEFFICIENTS

pacf\_coeff #PARTIAL AUTOCORRELATION COEFFICIENTS

**OUTPUT:**





