# 1

> w = rnorm(1000)

> hist(w,freq=FALSE)

> x=seq(min(w),max(w),by=0.001)

> y=dnorm(x,mean(w),sd(w))

> lines(x,y,col="blue",lwd=2)

> ave<-mean(w)

> print(ave)

> v = var(w)

> print(v)

# 2

> t<-rpois(100,2)

> print(t)

> m = mean(t)

> print(m)

> v = var(t)

> print(v)

>hist(t)

y= seq(1,1000,1)

> n = 1

> repeat{

+ m<-rpois(100,2)

+ y[n]<-mean(m)

+ n = n+1

+ if(n>1000)

+ {

+ break

+ }

+ }

> hist(y)

>sy = (y-2)/sqrt(0.02)

> m = mean(sy)

> print(m)

> v = var(sy)

> print(t)

> print(v)

>hist(sy)

# 二

(1)

> x = runif(1000,5,10)

> y = 4\*x-6

> print(mean(x))

> print(mean(y))

(2)

> print(var(x))

> print(var(y))

> c<-cov(x,y)

> print(c)

> co<-cor(x,y)

> print(co)

(3)

> y1 = x\*exp(2\*x^0)

> print(cor(x,y1))

> y2 = x\*exp(2\*x^1)

> print(cor(x,y2))

> y3 = x\*exp(2\*x^2)

> print(cor(x,y3))

>