R - code

```
> p<-0.1
> b<-rep(0,20)
> n<-b
> for (i in 1:21) b[i]<-dbinom(i-1,100,p)
> m<-100*p
 > s<-sqrt(100*p*(1-p))
 > for (i in 1:21)n[i]<-pnorm((i-.5-m)/s)-pnorm((i-1.5-m)/s)
 > barplot(rbind(n[1:21],b[1:21]),beside=T, space = c(0,1), main =
"Approximating a Binomial Distribution with the Normal Distribution",col =
c("red", "blue"), names.arg = c(0:20))
 > legend(50,0.1,legend=c("normal","binomial"), fill=c("red","blue"), cex=0.7,
text.width = 4)
```