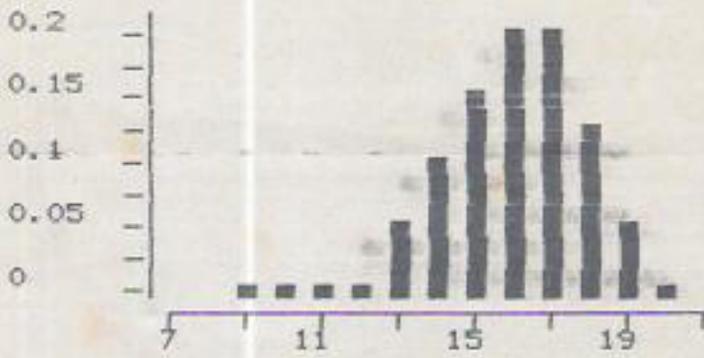


bplot(20,0.8)



rejection  
region.

$P(X \leq 13.5) = 0.01$   
 $P(X \leq 14) = 0.02$   
 $P(X \leq 15) = 0.06$   
 $P(X \leq 16) = 0.13$   
 $P(X \leq 17) = 0.22$   
 $P(X \leq 18) = 0.31$   
 $P(X \leq 19) = 0.43$   
 $P(X \leq 20) = 0.57$   
 $P(X \leq 21) = 0.73$   
 $P(X \leq 22) = 0.89$   
 $P(X \leq 23) = 0.98$   
 $P(X \leq 24) = 1.00$

The shaded area of the rejection region is  $P(X \leq 13.5) = 0.01$ . This means that if the test statistic falls in this region, we will reject the null hypothesis. The power of the test is the probability of rejecting the null hypothesis when it is false. In this case, the power is  $1 - 0.01 = 0.99$ .