

## INPUT AND OUTPUT FILE FOR Assignment - 3b

### distribution type is uniform

sample is

-0.03235743 0.8971014 0.5470645 0.844468 -0.1702406 0.6376978 0.6924623 -0.5301716 -  
0.7455103 -0.1630041

MLE is given Below

min max

-8.734590 9.674237

### distribution type is Normal

sample is

-1.372012 -0.1755337 2.901502 -1.449674 0.3452691 -2.224716 -1.882461 -1.629273 1.807985  
0.4747477

MLE is given Below

mu sigma

-0.3205997 1.6174866

### distribution type is geometric

sample is

6 0 0 0 0 1 2 0 0 2

MLE is given Below

prob

0.4761719

### distribution type is exponential

sample is

0.7300245 4.054967 0.7015482 0.02267148 1.350853

MLE is given Below

lambda

0.7289062

### distribution type is Beta

sample is

0.1691667 0.006728925 0.154047 0.1762181 0.0607896 0.0007103702 0.05136122 0.09352959  
0.09132703 0.003061011

MLE is given Below

alpha beta

0.6701113 7.8936218

### distribution type is poisson

sample is

3 13 1 11 3 7 6 6 13 7 8 6 6 12 4 10 10 14 5 6 5 6 10 5 10 12 8 11 6 5 6 9 6 10 10 8 10 10 10 7 4  
10 5 7 5 9 12 16 6 13 5 8 7 4 7 13 10 9 9 4 8 10 9 13 5 2 9 8 10 9 6 6 13 6 5 3 14 8 14 7 7 8 14 7  
11 6 11 11 10 7 9 11 3 9 4 4 14 14 5 7

MLE is given Below

lambda

8.15

### **distribution type is binomial**

sample is

0 1 0 1 1 1 1 0 0

MLE is given Below

p

0.6

### **distribution type is multinomial**

sample is

0 0 0 0 0 -

0 1 0 0 0 -

1 0 0 0 0 -

0 0 0 0 0 -

0 0 0 0 0 -

0 0 0 0 0 -

0 0 0 0 0 -

0 0 1 0 1 -

0 0 0 1 0 -

0 0 0 0 0 - MLE is given Below

[1] 0.0000000001 0.2034558902 0.5328965935 0.0000000001 0.0000000001 0.0000000001  
0.0000000001

[8] 0.3871564567 0.1789493596 0.0000000001

### **distribution type is multivariate normal**

sample is        [,1]    [,2]

[1,] 6.738255 10.365577

[2,] 6.109005 9.332507

[3,] 7.242948 11.936449

[4,] 9.902365 13.407630

[5,] 7.841778 6.060907

[6,] 4.197240 8.061320

[7,] 9.893088 10.928936

[8,] 4.986187 8.570151

[9,] 6.441265 9.227539

[10,] 7.428408 8.060925

MLE is given Below

mu1    mu2   sigma1   sigma2   sigma3   sigma4

7.190301 9.684170 3.120744 9.683629 2.086274 4.160162