

```
>> ee511_p2_q3ab(10)
```

```
Summary for Discrete uniform distribution 0,1,2,...9 for  
-Number of samples -50 with 5 bins
```

```
h =
```

```
0
```

```
p =
```

```
0.8442
```

```
st =
```

```
chi2stat: 1.4000
```

```
df: 4
```

```
edges: [0 1.8000 3.6000 5.4000 7.2000 9]
```

```
O: [10 8 9 13 10]
```

```
E: [10 10 10 10 10]
```

```
-The NULL hypothesis that "uniform dist random data fits the sample above" is NOT  
REJECTED
```

```
-Number of samples -50 with 8 bins
```

```
h =
```

```
0
```

```
p =
```

```
0.3397
```

```
st =
```

```
chi2stat: 7.9200
```

```
df: 7
```

```
edges: [0 1.1250 2.2500 3.3750 4.5000 5.6250 6.7500 7.8750 9]
```

```
O: [10 4 4 3 6 6 7 10]
```

```
E: [6.2500 6.2500 6.2500 6.2500 6.2500 6.2500 6.2500 6.2500]
```

```
-The NULL hypothesis that "uniform dist random data fits the sample above" is NOT  
REJECTED
```

```
-Number of samples -50 with 11 bins
```

```
h =
```

0

p =

0.6237

st =

```
chi2stat: 0.2407
df: 1
edges: [0 4.0909 9]
O: [21 29]
E: [22.7273 27.2727]
```

-The NULL hypothesis that "uniform dist random data fits the sample above" is NOT REJECTED

Summary for Discrete uniform distribution 0,1,2,...9 for  
-Number of samples -100 with 5 bins

h =

0

p =

0.0749

st =

```
chi2stat: 8.5000
df: 4
edges: [0 1.8000 3.6000 5.4000 7.2000 9]
O: [12 28 24 21 15]
E: [20 20 20 20 20]
```

-The NULL hypothesis that "uniform dist random data fits the sample above" is NOT REJECTED

-Number of samples -100 with 8 bins

h =

0

p =

0.5120

st =

chi2stat: 6.2400

df: 7

edges: [0 1.1250 2.2500 3.3750 4.5000 5.6250 6.7500 7.8750 9]

O: [12 10 18 11 13 7 14 15]

E: [12.5000 12.5000 12.5000 12.5000 12.5000 12.5000 12.5000 12.5000]

-The NULL hypothesis that "uniform dist random data fits the sample above" is NOT REJECTED

-Number of samples -100 with 11 bins

h =

1

p =

0.0014

st =

chi2stat: 28.7000

df: 10

edges: [0 0.8182 1.6364 2.4545 3.2727 4.0909 4.9091 5.7273 6.5455 7.3636 8.1818 9]

O: [5 7 10 18 11 0 13 7 14 11 4]

E: [9.0909 9.0909 9.0909 9.0909 9.0909 9.0909 9.0909 9.0909 9.0909 9.0909 9.0909]

-The NULL hypothesis that "uniform dist random data fits the sample above" is REJECTED

Summary for Discrete uniform distribution 0,1,2,...9 for

-Number of samples -500 with 5 bins

h =

0

p =

0.6626

st =

```
chi2stat: 2.4000
df: 4
edges: [0 1.8000 3.6000 5.4000 7.2000 9]
O: [95 98 107 91 109]
E: [100 100 100 100 100]
```

-The NULL hypothesis that "uniform dist random data fits the sample above" is NOT REJECTED

-Number of samples -500 with 8 bins

h =

1

p =

1.0257e-12

st =

```
chi2stat: 70.7840
df: 7
edges: [0 1.1250 2.2500 3.3750 4.5000 5.6250 6.7500 7.8750 9]
O: [95 43 55 50 57 44 47 109]
E: [62.5000 62.5000 62.5000 62.5000 62.5000 62.5000 62.5000 62.5000]
```

-The NULL hypothesis that "uniform dist random data fits the sample above" is REJECTED

-Number of samples -500 with 11 bins

h =

1

p =

2.0283e-08

st =

```

chi2stat: 56.0280
df: 10
edges: [0 0.8182 1.6364 2.4545 3.2727 4.0909 4.9091 5.7273 6.5455 7.3636
8.1818 9]
O: [50 45 43 55 50 0 57 44 47 59 50]
E: [45.4545 45.4545 45.4545 45.4545 45.4545 45.4545 45.4545 45.4545
45.4545 45.4545 45.4545]

```

-The NULL hypothesis that "uniform dist random data fits the sample above" is REJECTED

Summary for Discrete uniform distribution 0,1,2,...9 for  
 -Number of samples -1000 with 5 bins

h =

0

p =

0.4658

st =

```

chi2stat: 3.5800
df: 4
edges: [0 1.8000 3.6000 5.4000 7.2000 9]
O: [184 205 205 217 189]
E: [200 200 200 200 200]

```

-The NULL hypothesis that "uniform dist random data fits the sample above" is NOW REJECTED

-Number of samples -1000 with 8 bins

h =

1

p =

1.0240e-16

st =

```

chi2stat: 90.4000
df: 7

```

```
edges: [0 1.1250 2.2500 3.3750 4.5000 5.6250 6.7500 7.8750 9]
O: [184 87 118 120 85 114 103 189]
E: [125 125 125 125 125 125 125 125]
```

-The NULL hypothesis that "uniform dist random data fits the sample above" is  
REJECTED

-Number of samples -1000 with 11 bins

h =

1

p =

7.0370e-21

st =

```
chi2stat: 119.2940
df: 10
edges: [0 0.8182 1.6364 2.4545 3.2727 4.0909 4.9091 5.7273 6.5455 7.3636
8.1818 9]
O: [81 103 87 118 120 0 85 114 103 95 94]
E: [90.9091 90.9091 90.9091 90.9091 90.9091 90.9091 90.9091 90.9091
90.9091 90.9091 90.9091]
```

-The NULL hypothesis that "uniform dist random data fits the sample above" is  
REJECTED

>>