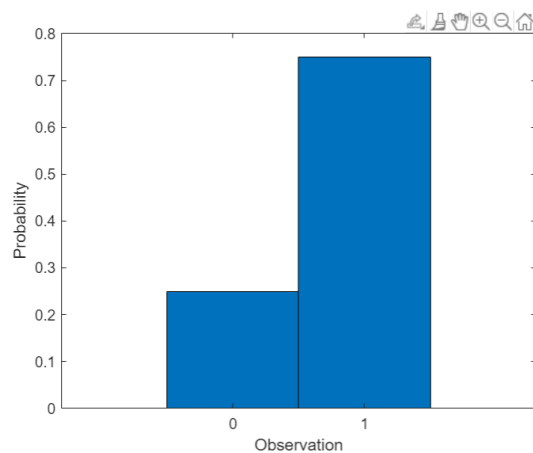


ASSIGNMENT-13

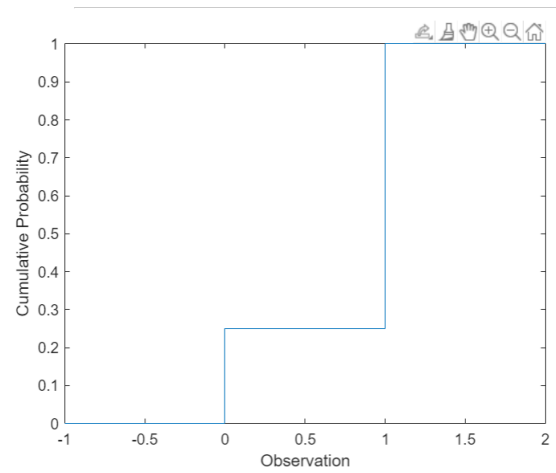
NAME: Yash Gupta

ROLL NO.: S20200010234

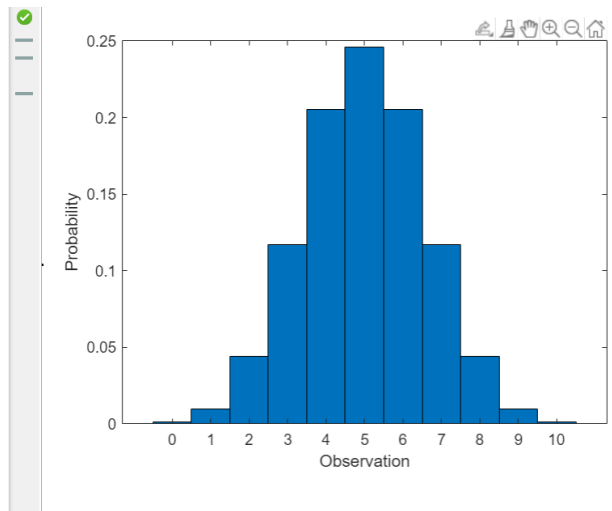
```
1 p = 0.75;  
2 x = 0:1;  
3 y = binopdf(0:1,1,p);  
4 figure  
5 bar(x,y,1)  
6 xlabel('Observation')  
7 ylabel('Probability')
```



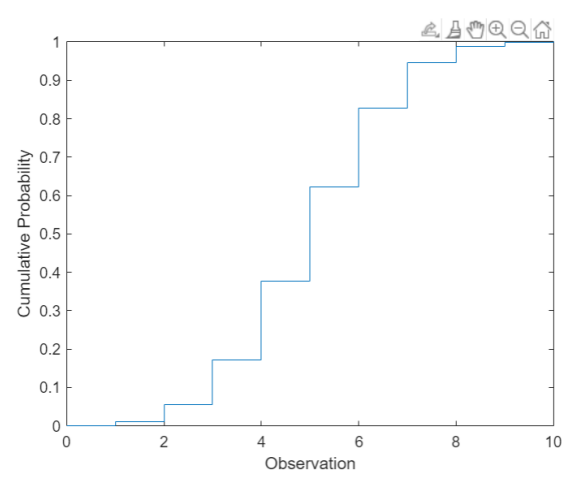
```
1 p = 0.75;  
2 y = binocdf(-1:2,1,p);  
3 figure  
4 stairs(-1:2,y)  
5 xlabel('Observation')  
6 ylabel('Cumulative Probability')
```



```
1 x = 0:10;
2 y = binopdf(x,10,0.5);
3 figure
4 bar(x,y,1)
5 xlabel('Observation')
6 ylabel('Probability')
```



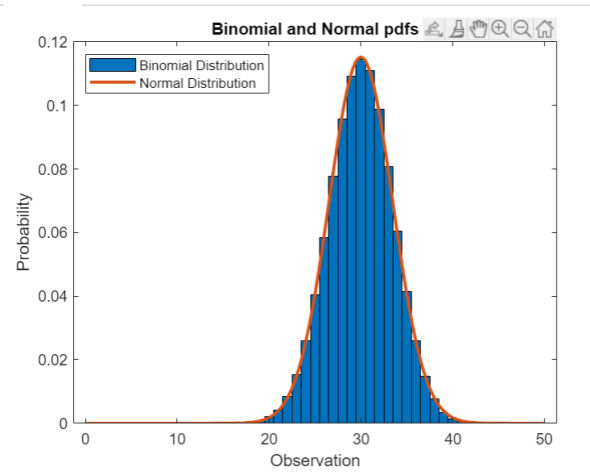
```
1 x = 0:10;
2 y = binocdf(x,10,0.5);
3 figure
4 stairs(x,y)
5 xlabel('Observation')
6 ylabel('Cumulative Probability')
```



```

1  N = 50;
2  p = 0.6;
3  x1 = 0:N;
4  y1 = binopdf(x1,N,p);
5  mu = N*p;
6  sigma = sqrt(N*p*(1-p));
7  x2 = 0:0.1:N;
8  y2 = normpdf(x2,mu,sigma);
9  figure
10 bar(x1,y1,1)
11 hold on
12 plot(x2,y2,'LineWidth',2)
13 xlabel('Observation')
14 ylabel('Probability')
15 title('Binomial and Normal pdfs')
16 legend('Binomial Distribution','Normal Distribution','location
17 hold off

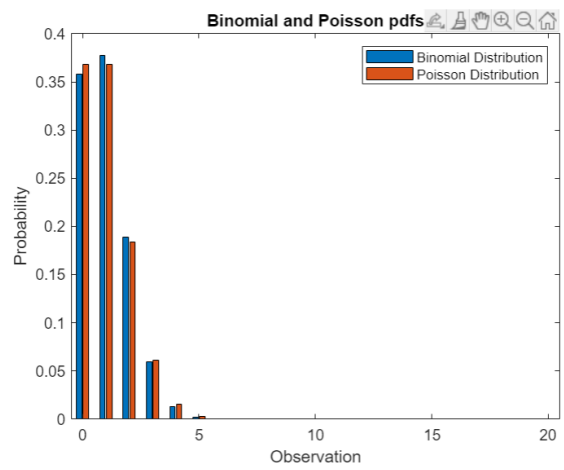
```



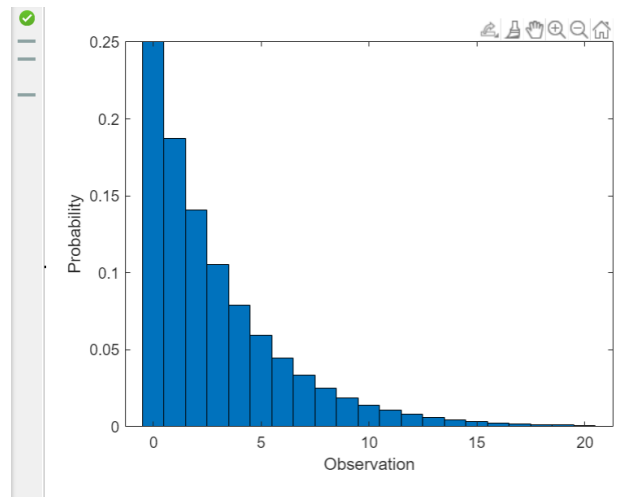
```

1  N = 20;
2  p = 0.05;
3  x = 0:N;
4  y1 = binopdf(x,N,p);
5  mu = N*p;
6  y2 = poisspdf(x,mu);
7  figure
8  bar(x,[y1; y2])
9  xlabel('Observation')
10 ylabel('Probability')
11 title('Binomial and Poisson pdfs')
12 legend('Binomial Distribution','Poisson Distribution','location

```



```
1 x = 0:20;  
2 y = geopdf(x,0.25);  
3 figure  
4 bar(x,y,1);  
5 xlabel('Observation');  
6 ylabel('Probability');
```



```
1 x = 0:20;  
2 y = geocdf(x,0.25);  
3 figure  
4 stairs(x,y)  
5 xlabel('Observation')  
6 ylabel('Cumulative Probability')
```

