

120BM0799(ABHINAV JHA)

ASSIGNMENT 2

Q1.

```
a=rand(3,3);
b=zeros(3,3);
for i=1:3
    for j=1:3
        if(a(i,j)>0.5)
            b(i,j)=1;
        end
    end
end
```

Q2

```
fprintf("For 1st Matrix \n");
row =input("number of rows??");
col=input("number of coloumns");
a=zeros(row,col);
for i=1:row
    for j=1:col
        fprintf("Enter element for location %d,%d",i,j);
        a(i,j)=input("");
    end
end
fprintf("For 2nd Matrix \n");
row =input("number of rows??");
col=input("number of coloumns");
b=zeros(row,col);
for i=1:row
    for j=1:col
        fprintf("Enter element for location %d,%d",i,j);
        b(i,j)=input("");
    end
end
[ra, ca] = size(a);
[rb, cb] = size(b);
c = zeros(ra, cb);
for row = 1 : ra
    for col = 1 : cb
        Sum = 0;
        for k = 1 : ca
            Sum = Sum + a(row, k) * b(k, col);
        end
        c(row, col) = Sum;
    end
end
```

Q3

```
row=input("number of rows??");
col=input("number of coloumns");
a=zeros(row,col);
for i=1:row
    for j=1:col
        fprintf("Enter element for location %d,%d",i,j);
        a(i,j)=input("");
    end
end
for i=1:row
    for j=1:col
        k=a(i,j);
        if (mod(a(i,j),2)==0)
            a(i,j)=a(i,j)*a(i,j);
        else
            a(i,j)=a(i,j)*a(i,j)*a(i,j);
        end
    end
end
end
```

Q4

```
x=0:pi/12:2*pi;
y1=sin(x);
y2=cos(x);
y3=tan(x);
plot(x,y1);
plot(x,y2);
plot(x,y3);
% OR plot(x,y1,x,y2,x,y3);
```