**ASSIGNMENT 9**

import java.util.\*;

class nqueens

{

public void NQ(int k, int n, int x[])

{

for(int i = 0; i<n; i++)

{

if(Place(k,i,x)==1)

{

x[k]=i;

if(k == n-1)

{

System.out.println("Queens\tPosition");

for(int a =0; a<n; a++)

{

System.out.println(a+"\t"+x[a]);

}

}

else

NQ(k+1, n, x);

x[k]=-1;

}

}

}

public int Place(int k, int i, int x[])

{

for(int j = 0; j<k; j++)

{

if(x[j]==i || Math.abs(x[j]-i)==Math.abs(j-k))

{

return 0;

}

}

return 1;

}

}

public class Main

{

public static void main(String[] args)

{

Scanner sc = new Scanner(System.in);

int x[] = new int[4];

System.out.println("Enter Queens Count");

int num = sc.nextInt();

nqueens n = new nqueens();

n.NQ(0,num,x);

}

}

OUTPUT:

Enter Queens Count

4

Queens Position

0 1

1 3

2 0

3 2

Queens Position

0 2

1 0

2 3

3 1

=== Code Execution Successful ===