```cpp
//=====================================================================
======
// Name       : shreejita Nandkishor Bhadane nqueen1.cpp
// batch no.  : T2
// roll no.      : 22
// PR name    : NQueen
//
//=====================================================================
======

#include <stdlib.h>
using namespace std;
int place(int r,int c);
int NQueen(int r,int n);
int print(int n);
int x[20],count;

int NQueen(int r,int n)
{
   int c,i;
        for (c=1;c<=n;c++)
{
                if(place(r,c))
                {
                        x[r]=c;
                        if(r==n)
                        {
                                print(n);
                        }
                        else
                        {
                        #include <iostream>
        NQueen(r+1,n);
                        }
                }

}

        return 0;
}
int place(int r,int c)
{
        int i;
        for(i=1;i<=r-1;i++)
        {
                if(x[i]==c)//column
                {
                        return 0;
```

```cpp
            }
            else
            {
                    if(abs(x[i]-c)==abs(i-r))//diagonal
                    {
                            return 0;
                    }
            }
        }
        return 1;
    }
int print(int n)
{
    int i,j;
    cout<<"\n\nSolution"<<++count<<"\n\n";
    for(i=1;i<=n;i++)
    {
            cout<<"\t"<<i;
    }
      for(i=1;i<=n;i++)
       {
              cout<<"\n"<<i;
                for(j=1;j<=n;j++)
                {
                        if(x[i]==j)
                                cout<<"\t Q";
                        else
                                cout<<"\t-";
                }
       }
        return 0;
    }
int main()
{
    int n;
      cout<<"\n*****N-Queen Solution*****\n";
      cout<<"\n Enter the no. of Queen:-\n";
    cin>>n;
    NQueen(1,n);
    return 0;

}
```

******OUTPUT******

*****N-Queen Solution*****

 Enter the no. of Queen:-
4

Solution1

	1	2	3	4
1	-	Q	-	-
2	-	-	-	Q
3	Q	-	-	-
4	-	-	Q	-

Solution2

	1	2	3	4
1	-	-	Q	-
2	Q	-	-	-
3	-	-	-	Q
4	-	Q	-	-