```
/***********************************************************************
********

                         Online C++ Compiler.
               Code, Compile, Run and Debug C++ program online.
Write your code in this editor and press "Run" button to compile and
execute it.

***********************************************************************
********/

#include <iostream>
using namespace std;
int NQueen(int r ,int n);
int x[20],count;
int place(int  r,int c)
{   int i;
        for(i=1;i<=r-1;i++)
        {
                if(x[i]==c)//column
                {
                        return 0;
                }
                else
                {
                        if(abs(x[i]-c)==abs(i-r))//diagonal
                        {
                        return 0;
                        }
                }
        }
        return 1;
}
int print(int n)
{
 int i,j;
 cout<<"\n\nSolution\n\n"<<++count;
 for(i=1;i<=n;i++)
 {
```

```cpp
            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 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
              {
                    NQueen(r+1,n);
              }
        }
    }
     return 0;
}


int main() {
```

```cpp
    int i,j,n,r;
        cout<<"\n ****** N-Queen Solution *****\n";
        cout<<"\n Enter the Queen:-\n";
        cin>>n;
        NQueen(1,n);


    return EXIT_SUCCESS;
}
```