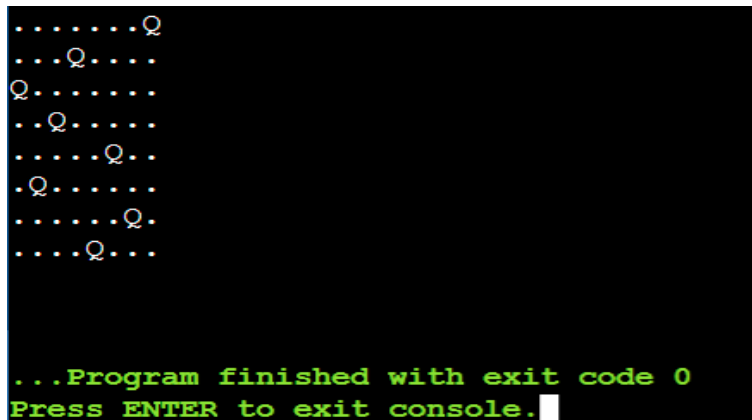


EXPERIMENT:02 Write the python program to solve 8-Queen problem

PROGRAM:

```
def solve(q=0, cols=set(), diag1=set(), diag2=set(), board=[]):  
    if q == 8:  
        for r in board: print(r)  
        print()  
        return  
    for c in range(8):  
        if c not in cols and q-c not in diag1 and q+c not in diag2:  
            solve(q+1, cols|{c}, diag1|{q-c}, diag2|{q+c}, board+[(".*c+"Q"+"."*(7-c))])  
  
solve()
```

OUTPUT:



```
.....Q  
...Q....  
Q.....  
..Q.....  
.....Q..  
.Q.....  
.....Q..  
....Q....  
  
...Program finished with exit code 0  
Press ENTER to exit console.
```