```
#include<stdio.h>
                    #include<math.h>
                    int board[20],count;
                    int main()
                    {
                     int n,i,j;
                     void queen(int row,int n);
                     printf(" - N Queens Problem Using Backtracking -");
                     printf("\n\nEnter number of Queens:");
                     scanf("%d",&n);
                     queen(1,n);
                     return 0;
                    }
                    void print(int n)
                    {
                     int i,j;
                     printf("\n\nSolution %d:\n\n",++count);
                     for(i=1;i<=n;++i)
                      printf("\t%d",i);
                     for(i=1;i<=n;++i)
                     {
                      printf("\n\n%d",i);
                      for(j=1;j<=n;++j)
                      {
                       if(board[i]==j)
                        printf("\tQ");
                       else
                        printf("\t-");
                      }
                     }
                    }
                    int place(int row,int column)
                    {
                     int i;
                     for(i=1;i<=row-1;++i)
                     {
                      if(board[i]==column)
                       return 0;
                      else
                       if(abs(board[i]-column)==abs(i-row))
                        return 0;
                     }
                     return 1;
                    }
                    void queen(int row,int n)
                    {
```

```
 int column;
 for(column=1;column<=n;++column)
 {
  if(place(row,column))
  {
   board[row]=column;
   if(row==n)
    print(n);
   else
    queen(row+1,n);
  }
 }
}
```