# include <stdio.h>

# include <stdlib.h>

int x[10],n,row,k,l,c=0,y[10][10];

int place(int k,int i)

{

for (row=1; row<=k-1; row++)

{

if ( (x[row]==i) || (abs(x[row]-i)==abs(row-k)))

{

return 0;

}

}

return 1;

}

void write()

{

for (int i=1;i<=n;i++)

{

for(int j=1;j<=n;j++)

{

if(j==x[i])

y[i][j]=1;

else

y[i][j]=0;

}

}

for (int i=1;i<=n;i++)

{

for(int j=1;j<=n;j++)

{

if(y[i][j]==1)

printf("Q\t");

else

printf("--\t");

}

printf("\n");

}

}

void nqueen(int k,int n)

{

for (int i=1;i<=n;i++)

{

if (place(k,i)==1)

{

x[k]=i;

if(k==n)

{

c++;

write();

printf("\n");

}

else

nqueen(k+1,n);

}

}

}

int main()

{

printf("Enter number of queens");

scanf("%d",&n);

nqueen(1,n);

printf("%d",c);

return 0;

}

