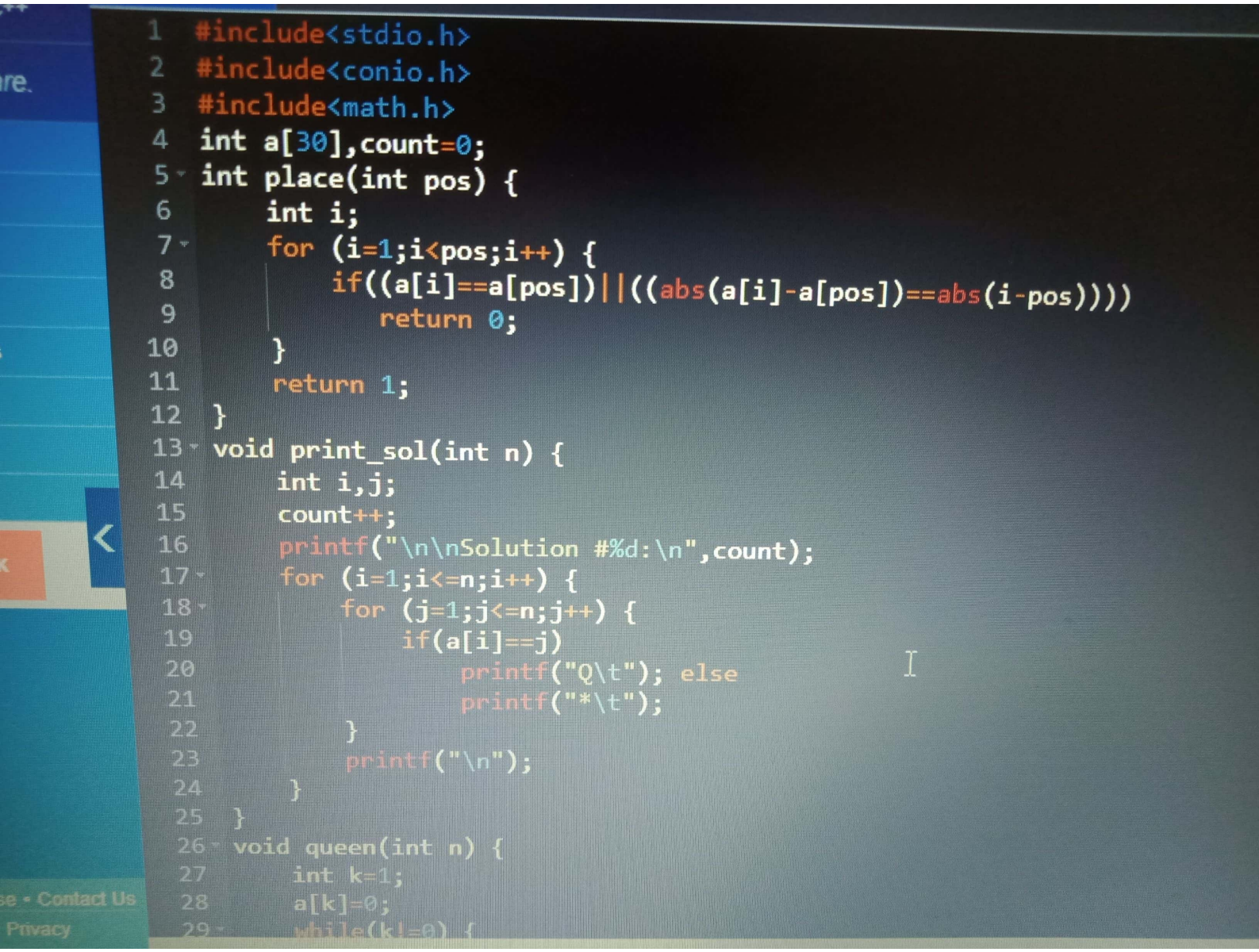
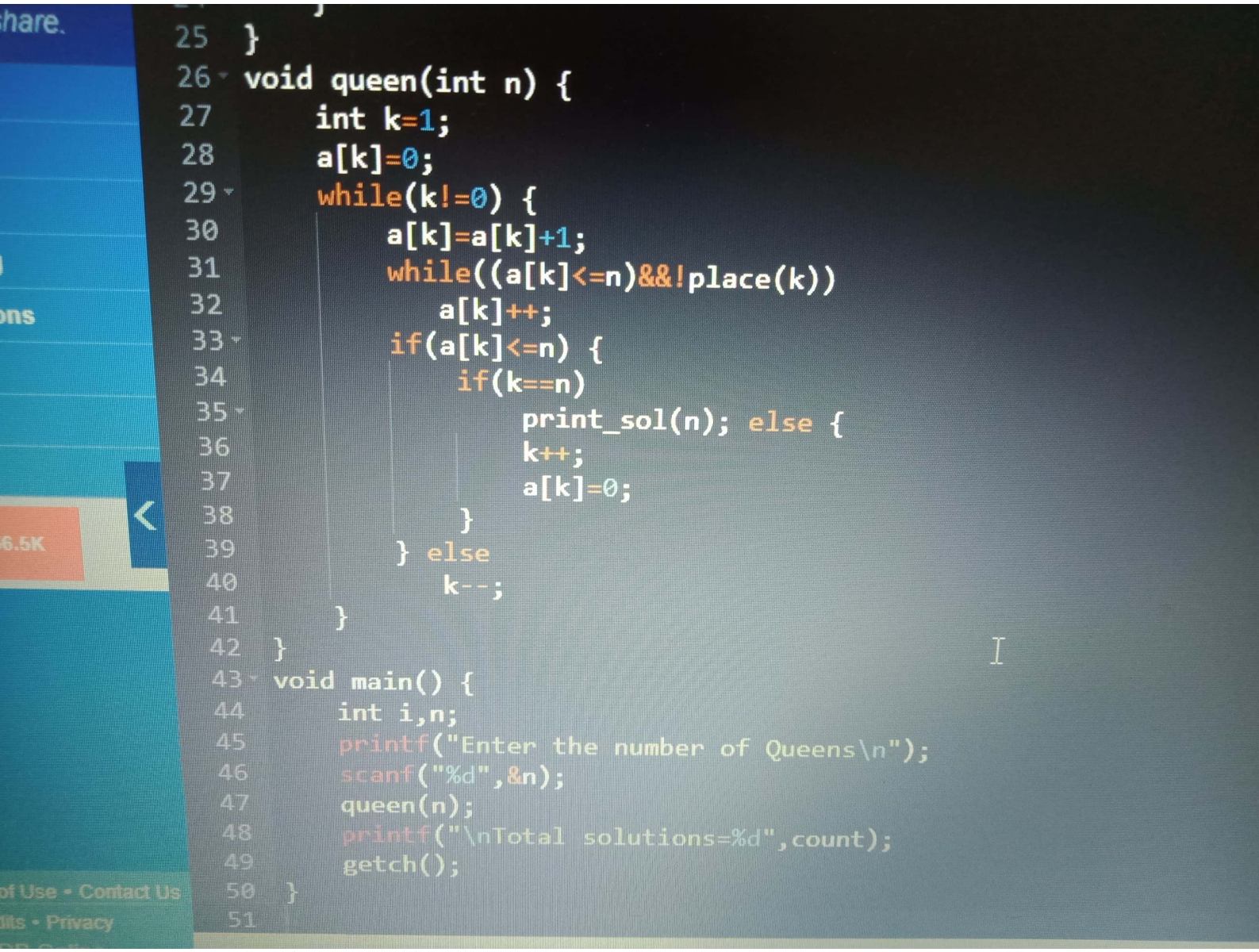


```c
#include<stdio.h>
#include<conio.h>
#include<math.h>
int a[30],count=0;
int place(int pos) {
    int i;
    for (i=1;i<pos;i++) {
        if((a[i]==a[pos])||((abs(a[i]-a[pos])==abs(i-pos))))
            return 0;
    }
    return 1;
}
void print_sol(int n) {
    int i,j;
    count++;
    printf("\n\nSolution #%d:\n",count);
    for (i=1;i<=n;i++) {
        for (j=1;j<=n;j++) {
            if(a[i]==j)
                printf("Q\t"); else
                printf("*\t");
        }
        printf("\n");
    }
}
void queen(int n) {
    int k=1;
    a[k]=0;
    while(k!=0) {
```



```
}
void queen(int n) {
    int k=1;
    a[k]=0;
    while(k!=0) {
        a[k]=a[k]+1;
        while((a[k]<=n)&&!place(k))
            a[k]++;
        if(a[k]<=n) {
            if(k==n)
                print_sol(n); else {
                k++;
                a[k]=0;
            }
        } else
            k--;
    }
}
void main() {
    int i,n;
    printf("Enter the number of Queens\n");
    scanf("%d",&n);
    queen(n);
    printf("\nTotal solutions=%d",count);
    getch();
}
```