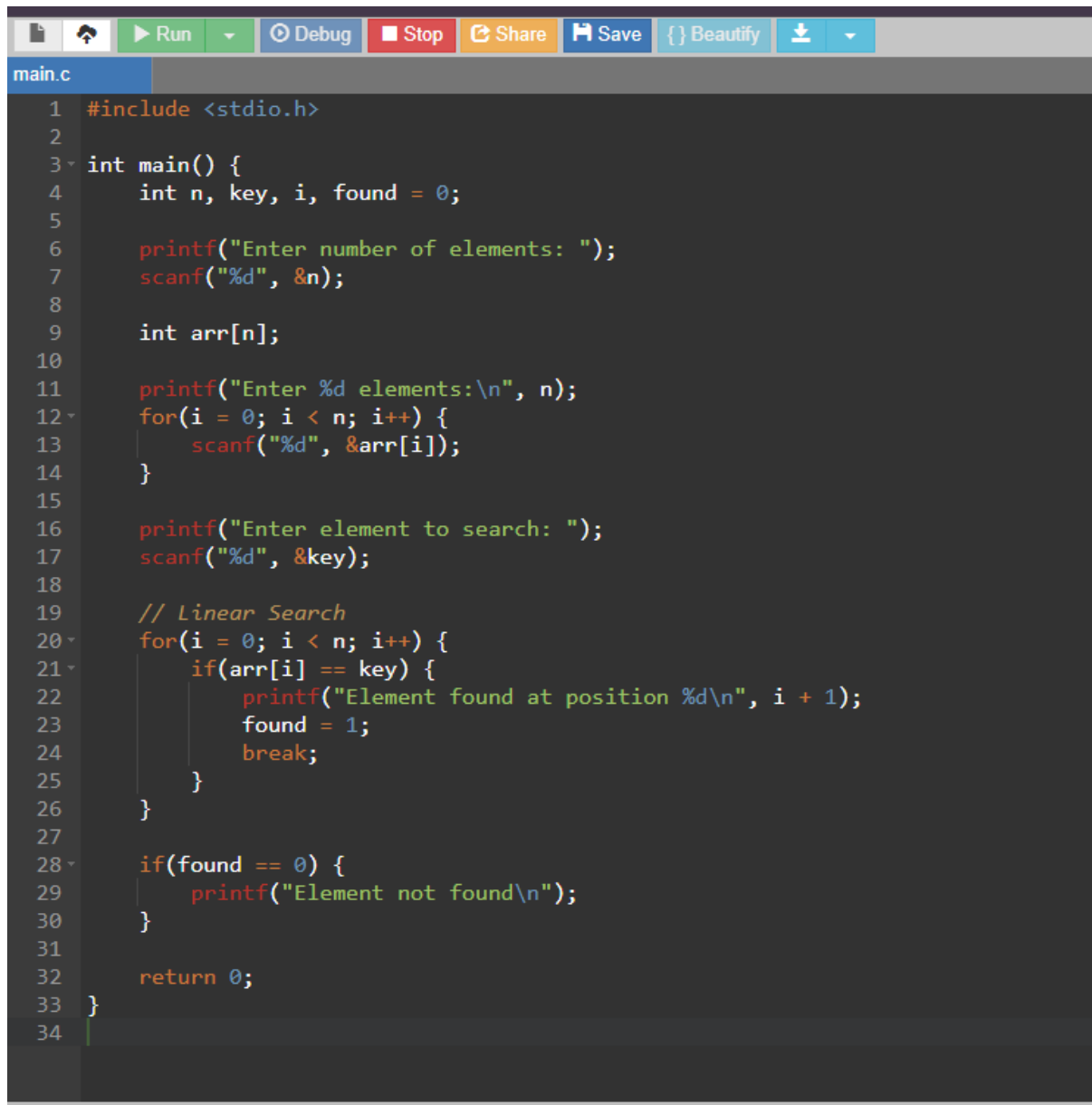


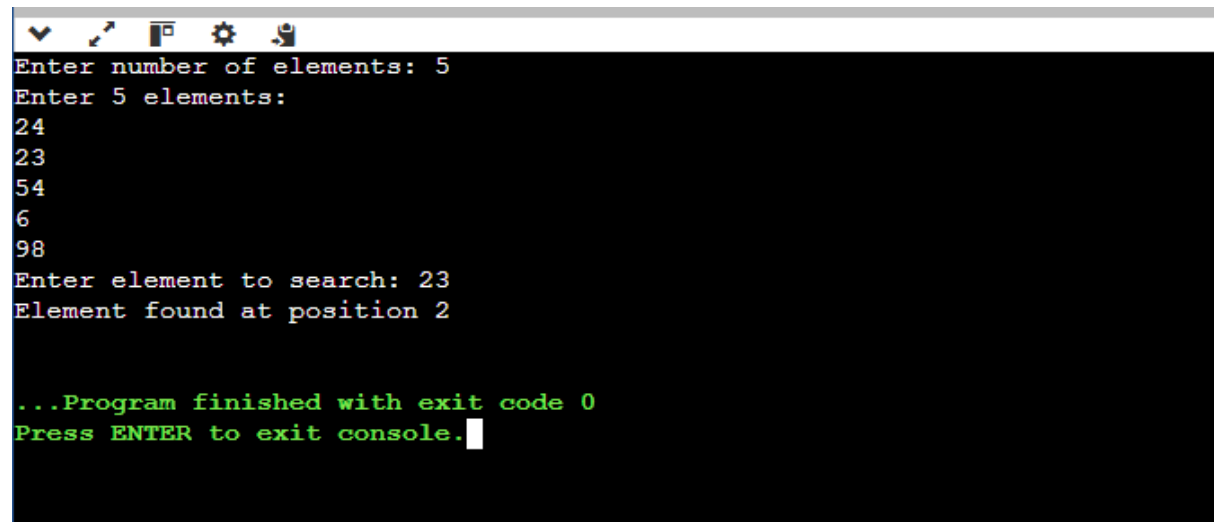
Linear search:

Code:

A screenshot of a C code editor with a dark theme. The editor has a toolbar at the top with buttons for Run, Debug, Stop, Share, Save, Beautify, and a download icon. The file name 'main.c' is shown in the top left. The code is a C program for linear search, with line numbers 1 through 34 on the left margin. The code includes stdio.h, defines a main function with variables n, key, i, and found, prompts the user for the number of elements and the elements themselves, prompts for the element to search, and implements a linear search loop. If the element is found, it prints the position; otherwise, it prints 'Element not found'.

```
1  #include <stdio.h>
2
3  int main() {
4      int n, key, i, found = 0;
5
6      printf("Enter number of elements: ");
7      scanf("%d", &n);
8
9      int arr[n];
10
11     printf("Enter %d elements:\n", n);
12     for(i = 0; i < n; i++) {
13         scanf("%d", &arr[i]);
14     }
15
16     printf("Enter element to search: ");
17     scanf("%d", &key);
18
19     // Linear Search
20     for(i = 0; i < n; i++) {
21         if(arr[i] == key) {
22             printf("Element found at position %d\n", i + 1);
23             found = 1;
24             break;
25         }
26     }
27
28     if(found == 0) {
29         printf("Element not found\n");
30     }
31
32     return 0;
33 }
34
```

Output:

A screenshot of a terminal window with a dark background and light-colored text. The window has a title bar at the top with several icons. The text inside the terminal shows a sequence of user inputs and program outputs. The user enters '5' for the number of elements, then five numbers (24, 23, 54, 6, 98) for the elements themselves. Then, the user enters '23' to search for an element, and the program outputs that it was found at position 2. Finally, the program ends with a message about the exit code and a prompt to press ENTER to exit the console.

```
Enter number of elements: 5
Enter 5 elements:
24
23
54
6
98
Enter element to search: 23
Element found at position 2

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