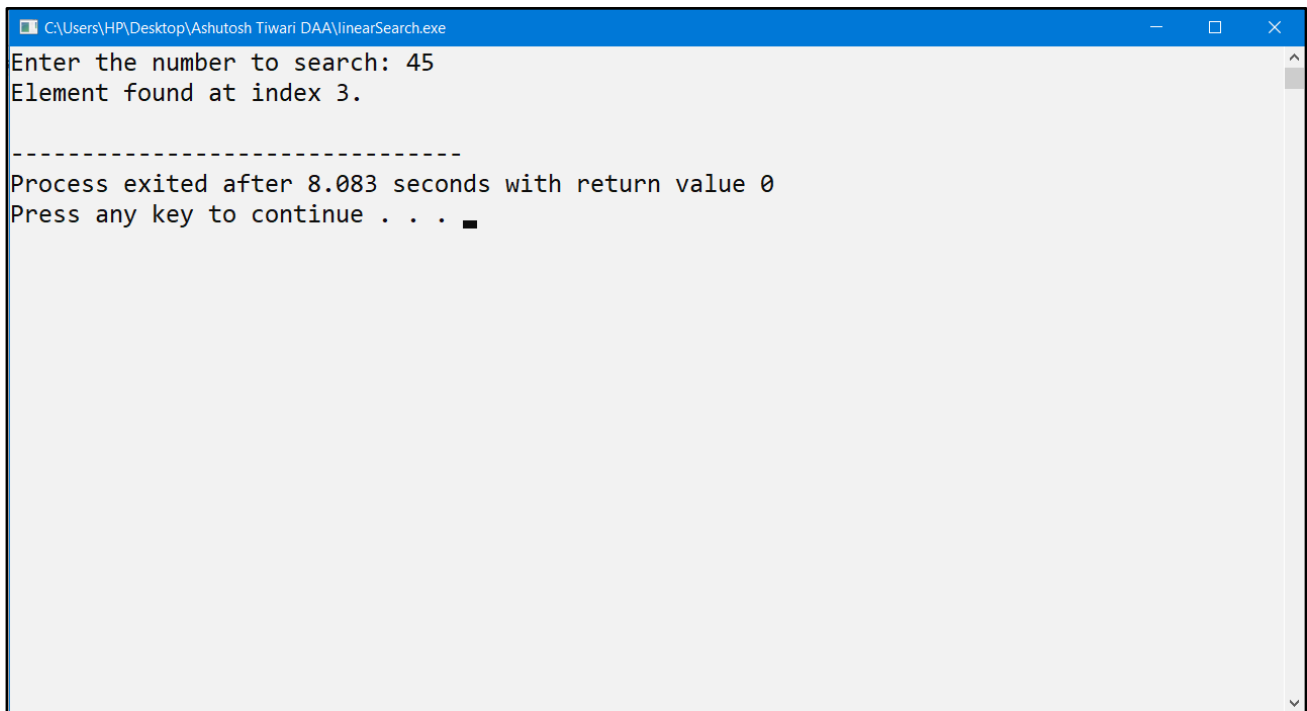
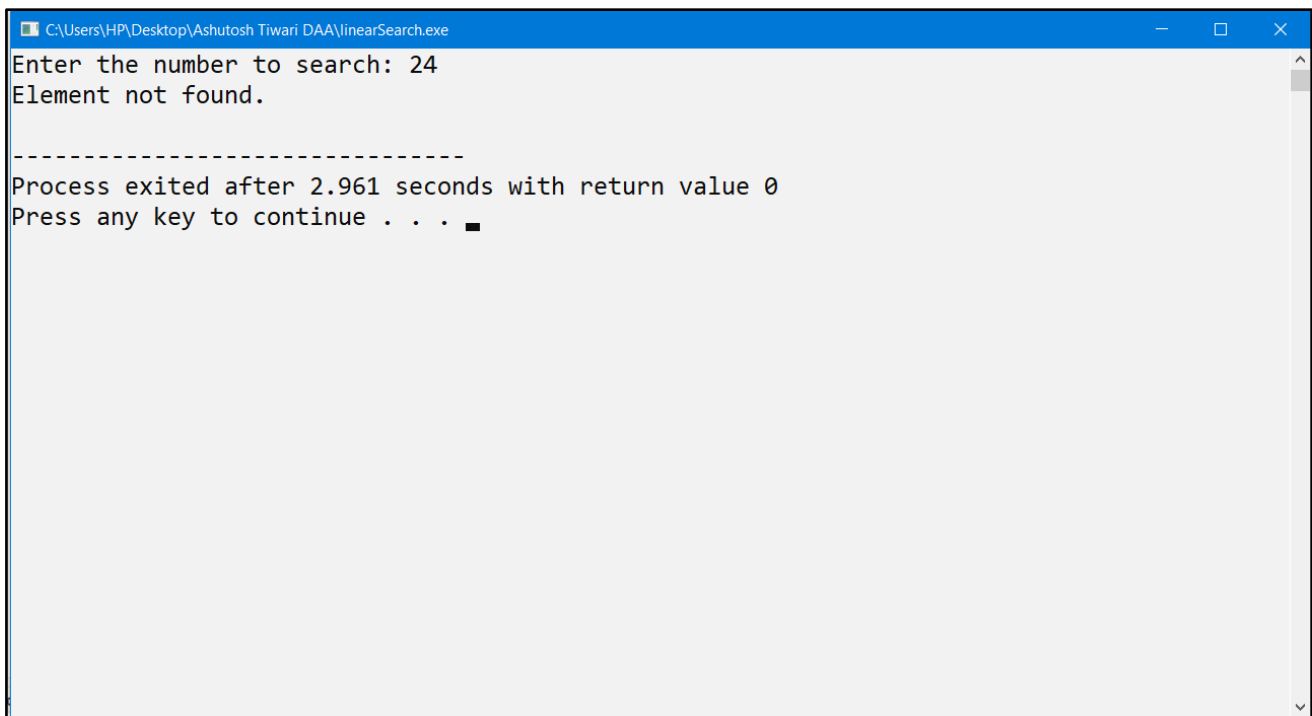


OUTPUT



```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\linearSearch.exe
Enter the number to search: 45
Element found at index 3.

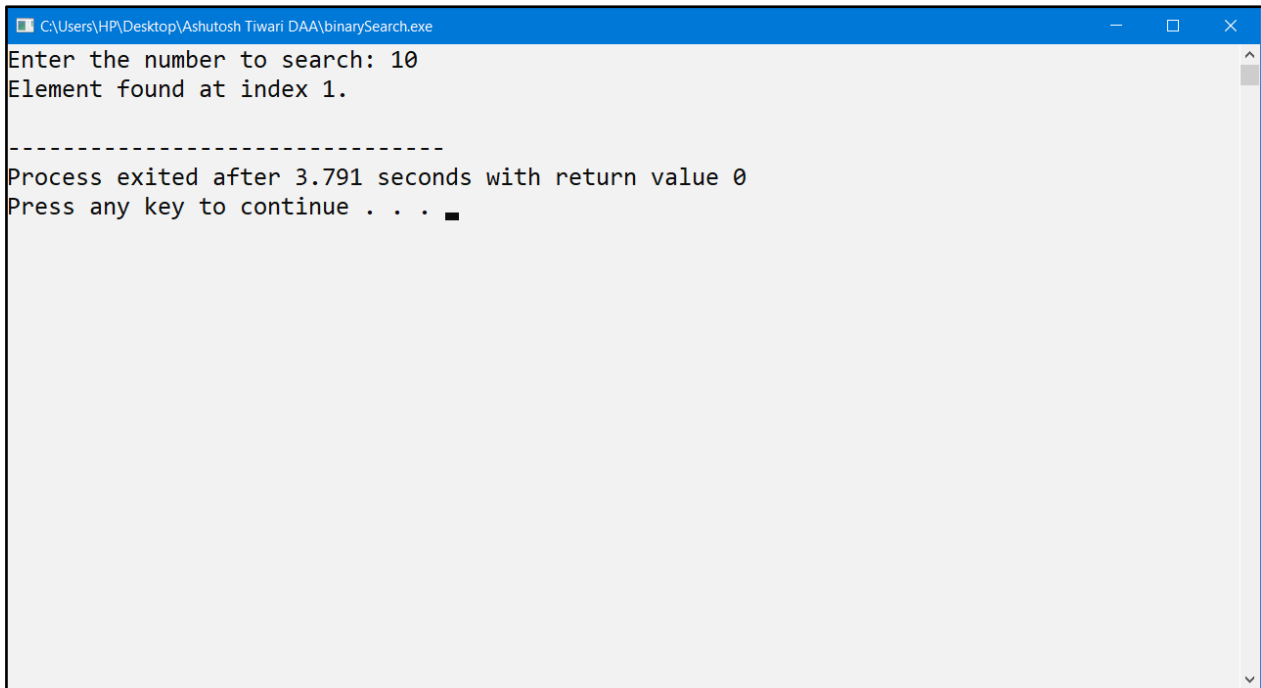
-----
Process exited after 8.083 seconds with return value 0
Press any key to continue . . . █
```



```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\linearSearch.exe
Enter the number to search: 24
Element not found.

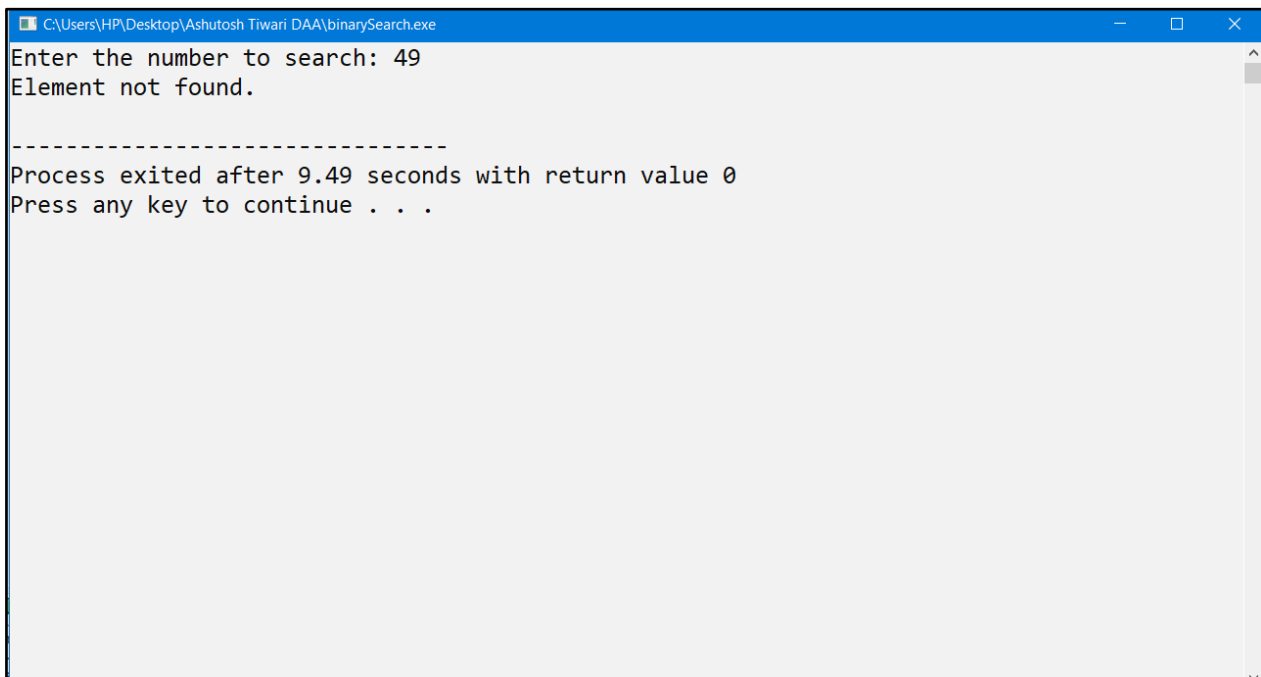
-----
Process exited after 2.961 seconds with return value 0
Press any key to continue . . . █
```

OUTPUT



```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\binarySearch.exe
Enter the number to search: 10
Element found at index 1.

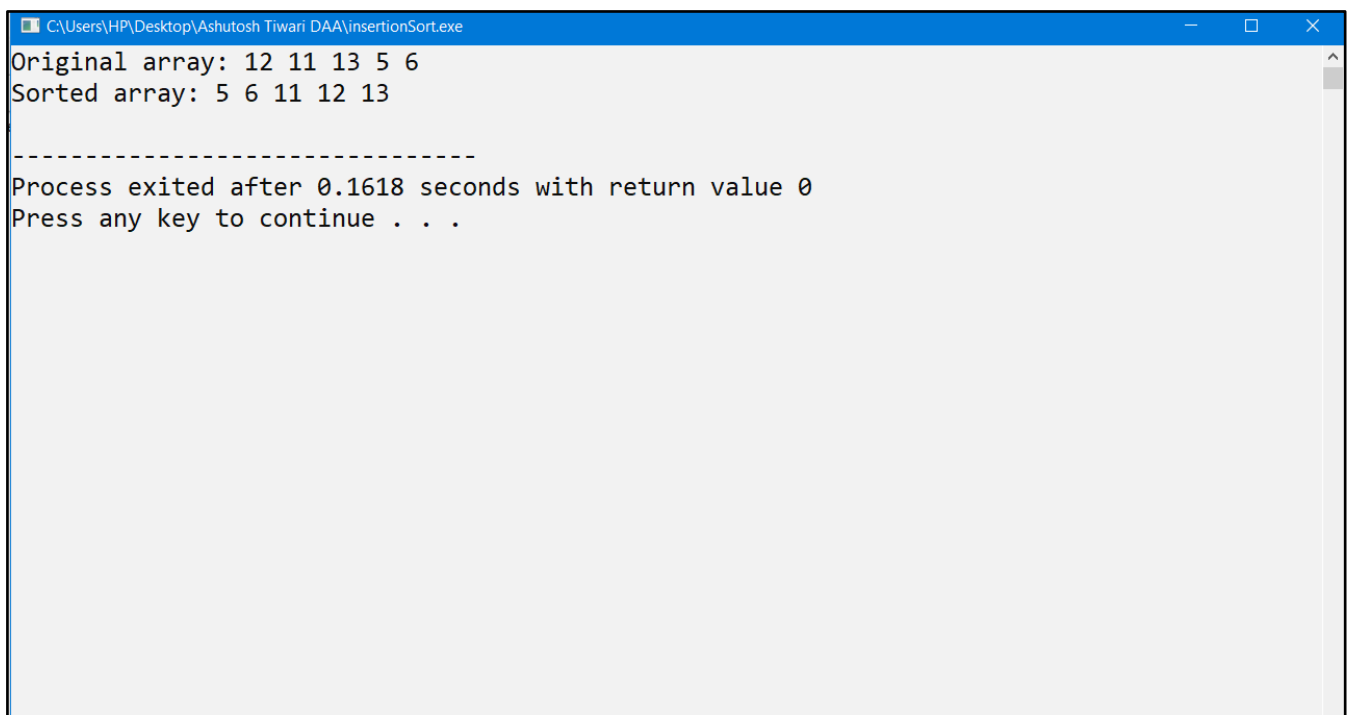
-----
Process exited after 3.791 seconds with return value 0
Press any key to continue . . . ■
```



```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\binarySearch.exe
Enter the number to search: 49
Element not found.

-----
Process exited after 9.49 seconds with return value 0
Press any key to continue . . .
```

OUTPUT

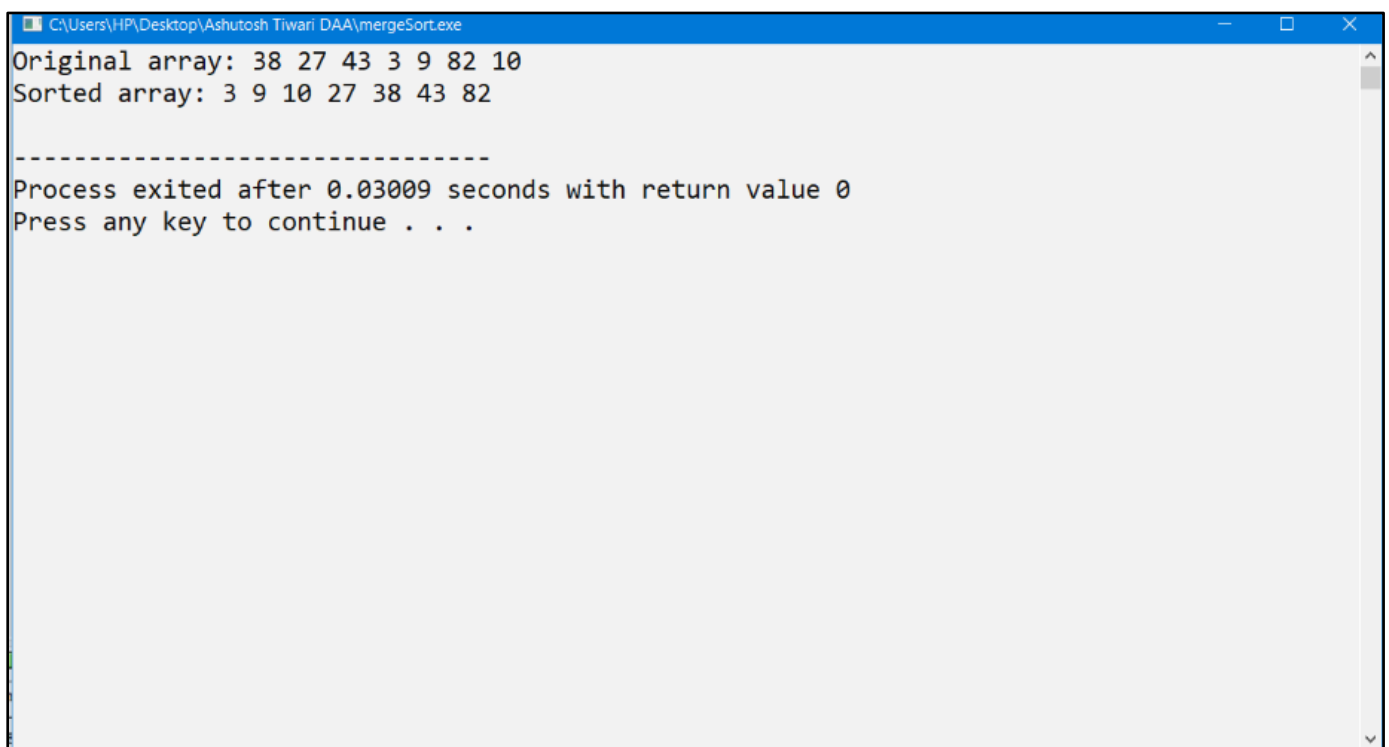


```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\insertionSort.exe
Original array: 12 11 13 5 6
Sorted array: 5 6 11 12 13

-----
Process exited after 0.1618 seconds with return value 0
Press any key to continue . . .
```

The image shows a Windows command prompt window with a blue title bar. The title bar text is "C:\Users\HP\Desktop\Ashutosh Tiwari DAA\insertionSort.exe". The window contains the following text: "Original array: 12 11 13 5 6", "Sorted array: 5 6 11 12 13", a line of ten dashes, "Process exited after 0.1618 seconds with return value 0", and "Press any key to continue . . .". A vertical scrollbar is visible on the right side of the window.

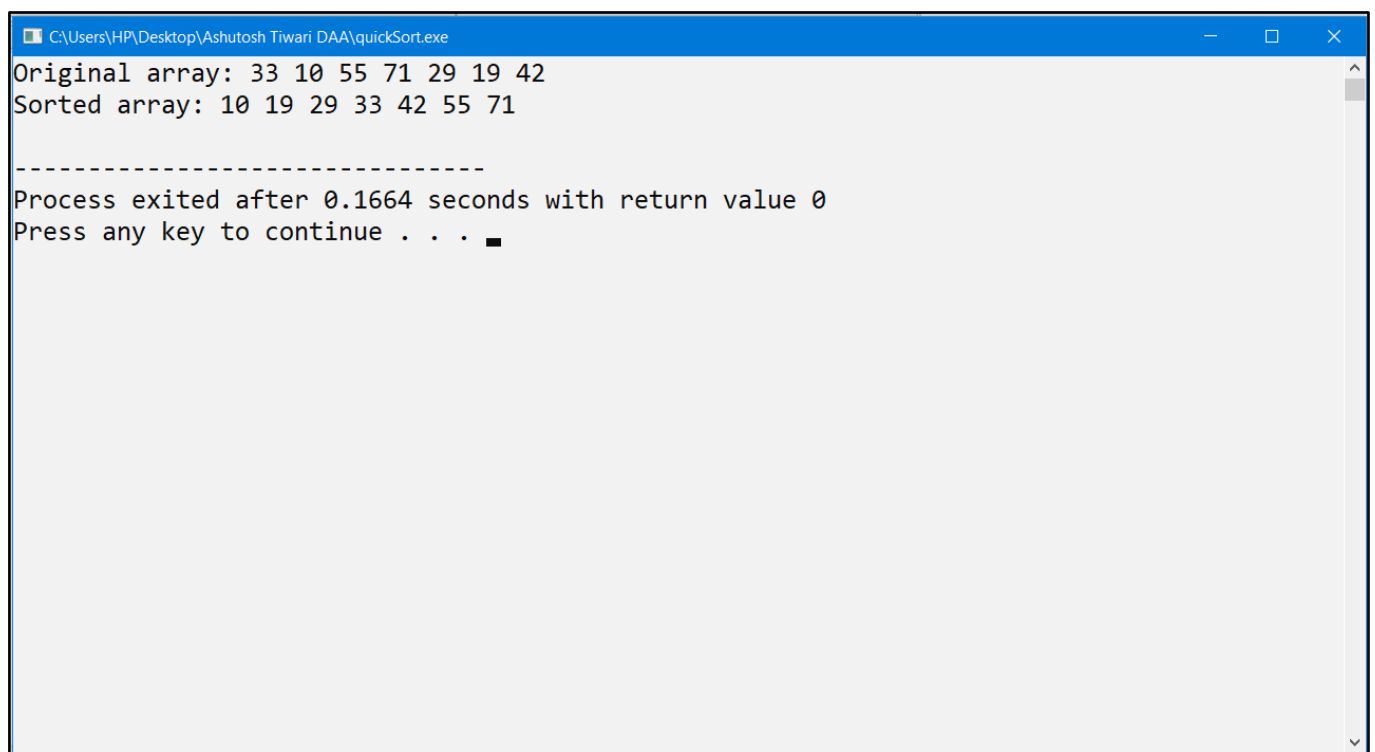
OUTPUT



A screenshot of a Windows command prompt window. The title bar at the top reads "C:\Users\HP\Desktop\Ashutosh Tiwari DAA\mergeSort.exe". The window contains the following text:

```
Original array: 38 27 43 3 9 82 10  
Sorted array: 3 9 10 27 38 43 82  
  
-----  
Process exited after 0.03009 seconds with return value 0  
Press any key to continue . . .
```

OUTPUT

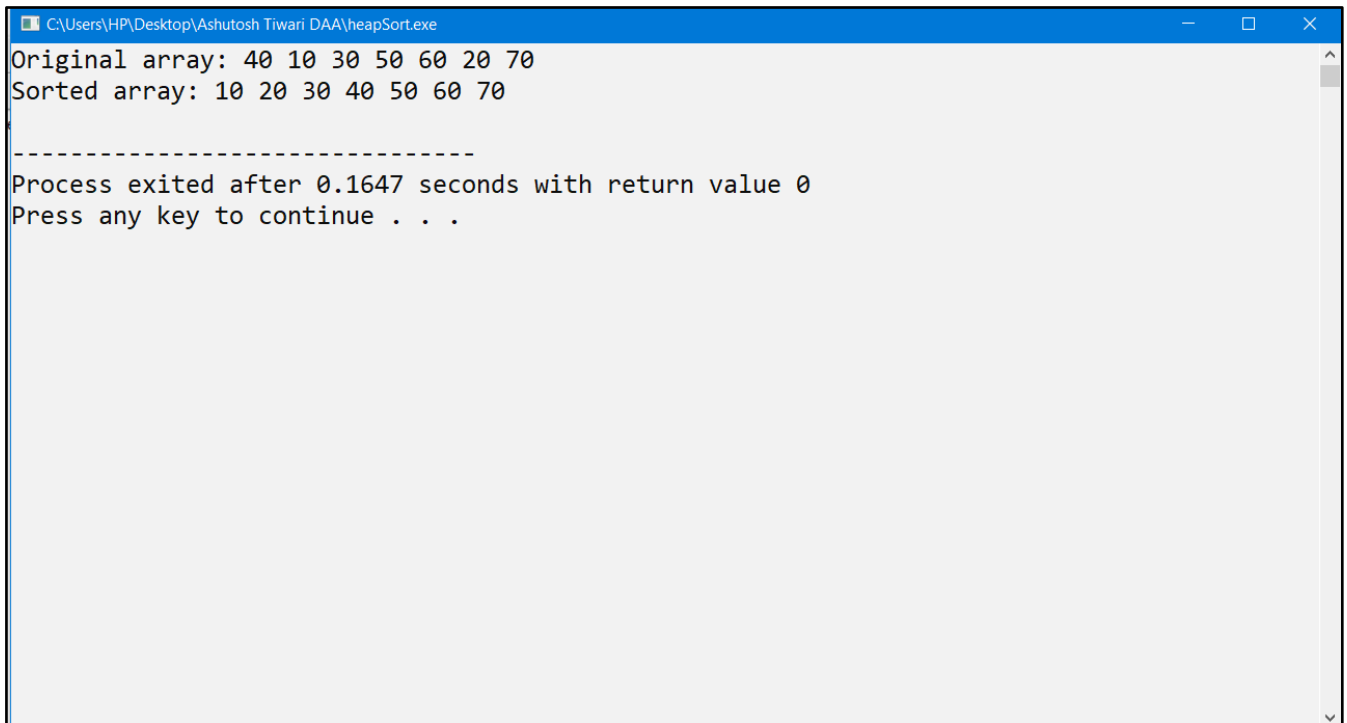


```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\quickSort.exe
Original array: 33 10 55 71 29 19 42
Sorted array: 10 19 29 33 42 55 71

-----
Process exited after 0.1664 seconds with return value 0
Press any key to continue . . .
```

The image shows a Windows command prompt window with a blue title bar. The title bar text is "C:\Users\HP\Desktop\Ashutosh Tiwari DAA\quickSort.exe". The window contains the following text: "Original array: 33 10 55 71 29 19 42", "Sorted array: 10 19 29 33 42 55 71", a line of ten dashes, "Process exited after 0.1664 seconds with return value 0", and "Press any key to continue . . .". A small black square cursor is visible at the end of the last line. The window has standard Windows window controls (minimize, maximize, close) in the top right corner.

OUTPUT

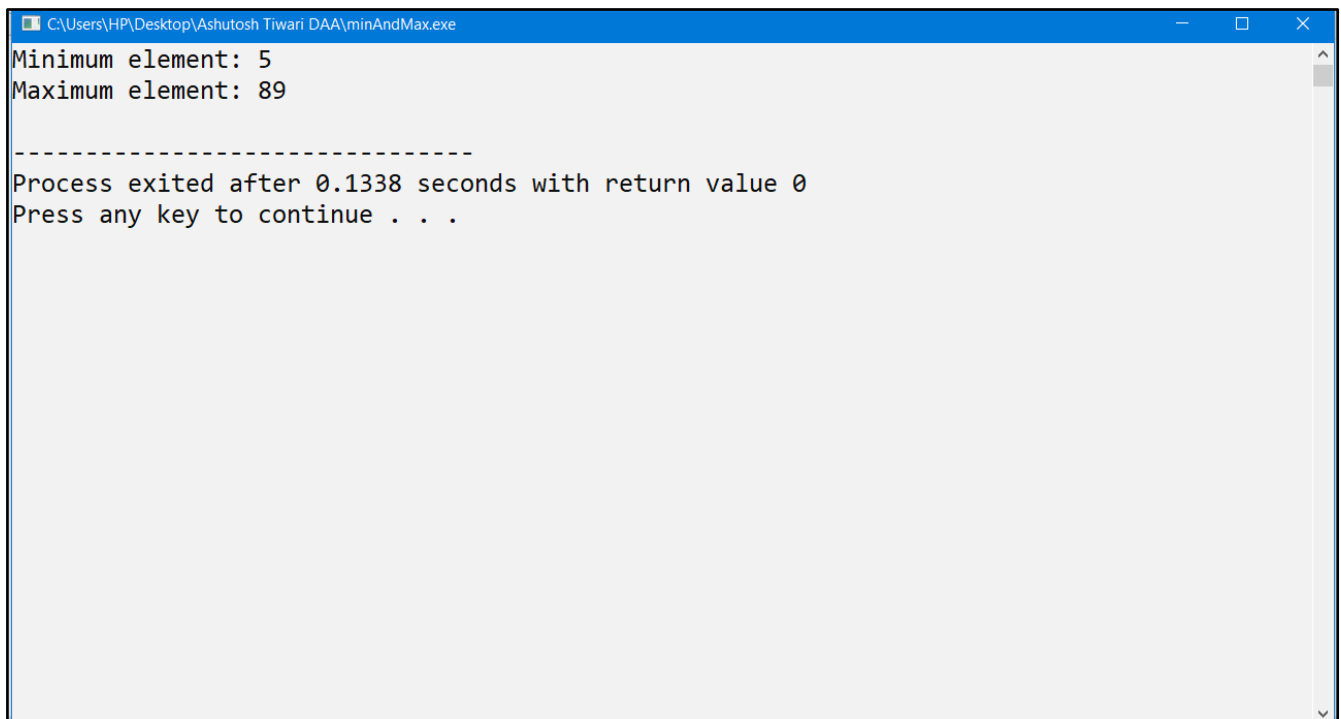


```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\heapSort.exe
Original array: 40 10 30 50 60 20 70
Sorted array: 10 20 30 40 50 60 70

-----
Process exited after 0.1647 seconds with return value 0
Press any key to continue . . .
```

The image shows a screenshot of a Windows command prompt window. The title bar at the top reads "C:\Users\HP\Desktop\Ashutosh Tiwari DAA\heapSort.exe". The window contains the following text: "Original array: 40 10 30 50 60 20 70", "Sorted array: 10 20 30 40 50 60 70", a line of seven dashes, "Process exited after 0.1647 seconds with return value 0", and "Press any key to continue . . .". The window has a standard Windows interface with a blue title bar and a scrollbar on the right side.

OUTPUT



A screenshot of a Windows command prompt window. The title bar at the top is blue and contains the text "C:\Users\HP\Desktop\Ashutosh Tiwari DAA\minAndMax.exe" followed by standard window control buttons (minimize, maximize, close). The main area of the window is white and contains the following text: "Minimum element: 5", "Maximum element: 89", a line of ten dashes "-----", "Process exited after 0.1338 seconds with return value 0", and "Press any key to continue . . .". A vertical scrollbar is visible on the right side of the window.

```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\minAndMax.exe
Minimum element: 5
Maximum element: 89
-----
Process exited after 0.1338 seconds with return value 0
Press any key to continue . . .
```

OUTPUT

```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\stackArray.exe

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 1
Enter value to push: 10
10 pushed to stack

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 4

-----
Process exited after 9.869 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\stackArray.exe

Enter your choice: 1
Enter value to push: 20
20 pushed to stack

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 2
Popped value: 20

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 3
Stack elements:
10

--- Stack Menu ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 4

-----
Process exited after 30.76 seconds with return value 0
Press any key to continue . . .
```


OUTPUT

```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\stackLinkedList.exe

--- Stack Menu (Linked List) ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 1
Enter value to push: 10
10 pushed to stack

--- Stack Menu (Linked List) ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 3
Stack elements:
10

--- Stack Menu (Linked List) ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 4

-----
Process exited after 8.248 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\stackLinkedList.exe

Enter your choice: 1
Enter value to push: 20
20 pushed to stack

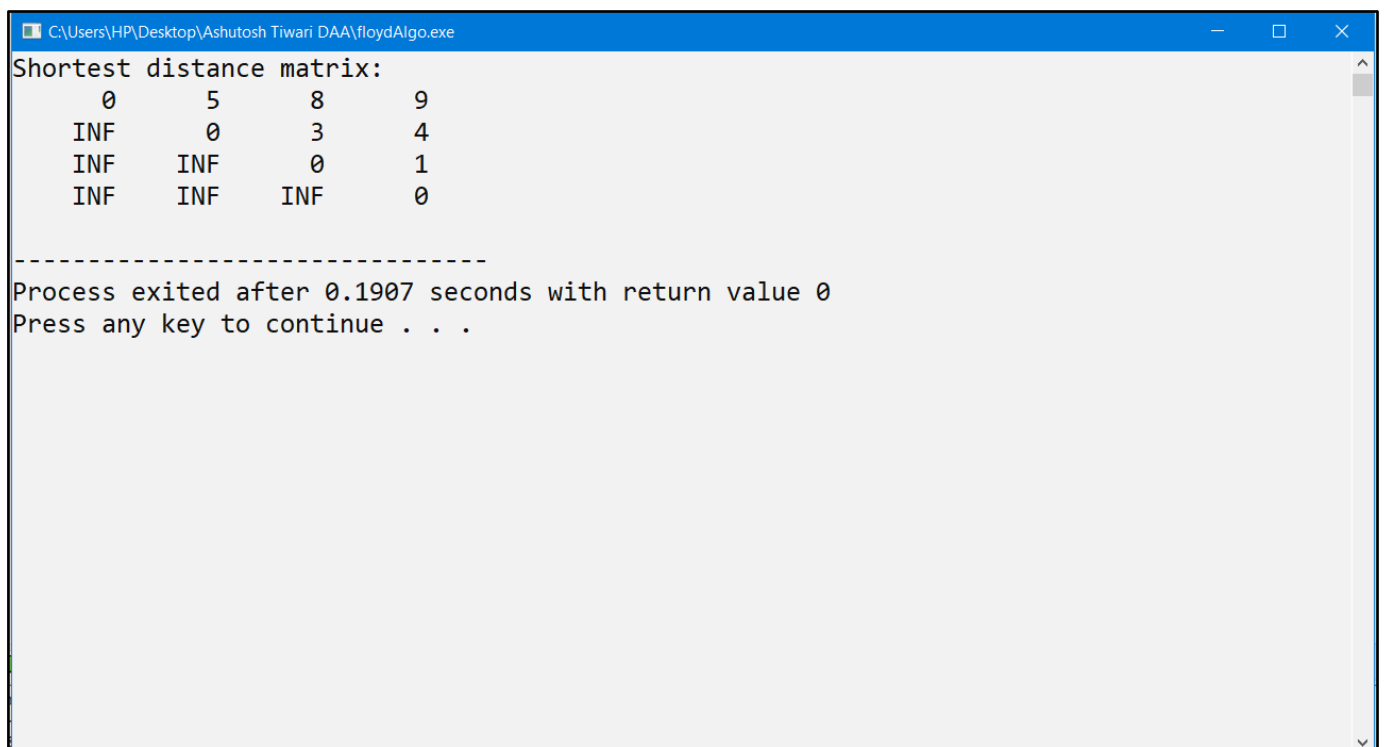
--- Stack Menu (Linked List) ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 2
Popped value: 20

--- Stack Menu (Linked List) ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 3
Stack elements:
10

--- Stack Menu (Linked List) ---
1. Push
2. Pop
3. Display
4. Exit
Enter your choice: 4

-----
Process exited after 21.09 seconds with return value 0
Press any key to continue . . .
```

OUTPUT



A screenshot of a Windows command prompt window titled "C:\Users\HP\Desktop\Ashutosh Tiwari DAA\floydAlgo.exe". The window displays the output of a program that calculates the shortest distance matrix for a graph. The output shows a 4x4 matrix with values 0, 5, 8, 9, INF, 0, 3, 4, INF, INF, 0, 1, and INF, INF, INF, 0. Below the matrix, a separator line of dashes is shown, followed by the text "Process exited after 0.1907 seconds with return value 0" and "Press any key to continue . . .".

```
C:\Users\HP\Desktop\Ashutosh Tiwari DAA\floydAlgo.exe
Shortest distance matrix:
    0    5    8    9
  INF    0    3    4
  INF  INF    0    1
  INF  INF  INF    0

-----
Process exited after 0.1907 seconds with return value 0
Press any key to continue . . .
```