Institute of Computer Technology
B. Tech. Computer Science and Engineering

Sub: ESFP – I
Course Code: 2CSE102

**Practical – 13**

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Class: B
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## Q.1.Problem Definition:

**Description: Search element in array list.**

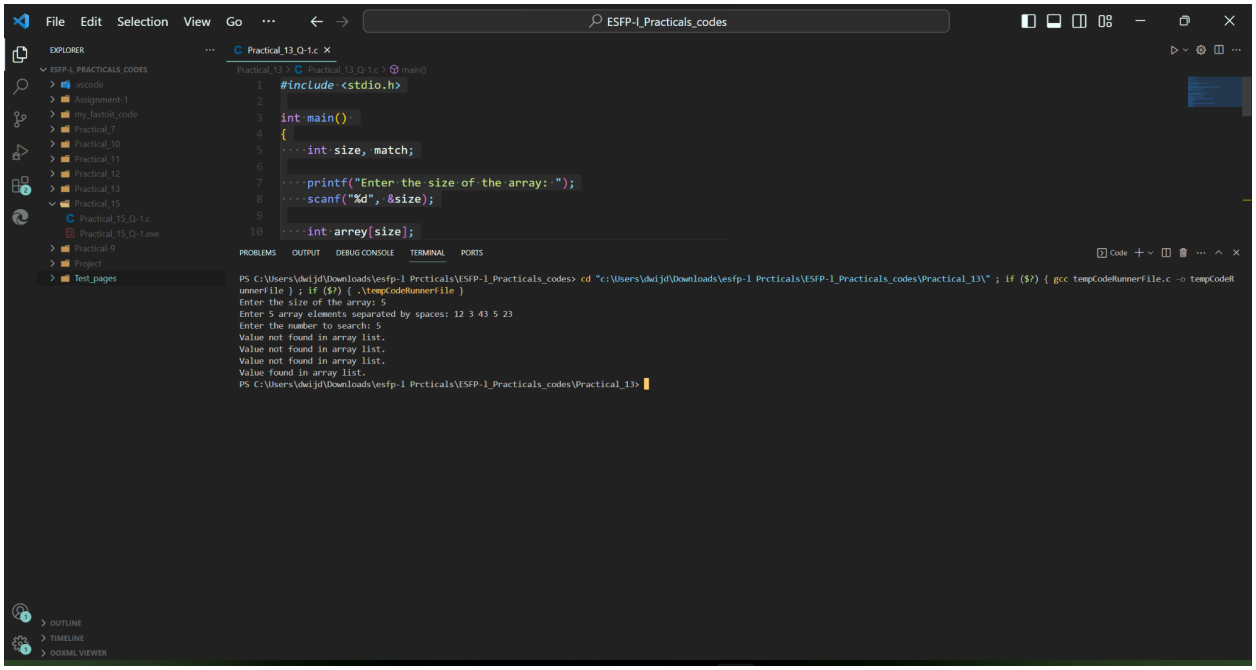
Make a program in C, to accept any random 10 number from the user in the array list. Now, input one random number from user, and then find this number is existing under array list or not.

**Code:**

```c
#include <stdio.h>

int main()
{
    int size, match;

    printf("Enter the size of the array: ");
    scanf("%d", &size);

    int arrey[size];
    printf("Enter %d array elements separated by spaces:
", size);
    for (int i = 0; i < size; i++)
    {
        scanf("%d", &arrey[i]);
```

```
    }

    printf("Enter the number to search: ");
    scanf("%d", &match);
    for (int i = 0; i < size; i++)
    {
        if (arrey[i] == match)
        {
            printf("Value found in array list.\n");
            break;
        }
        else
        {
            printf("Value not found in array list.\n");
        }
    }
    return 0;
}
```

**Output:**




```
PS C:\Users\dwijd\Downloads\esfp-1 Prcticals\ESFP-1_Practicals_codes> cd "c:\Users\dwijd
unnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter the size of the array: 5
Enter 5 array elements separated by spaces: 12 3 43 5 23
Enter the number to search: 5
Value not found in array list.
Value not found in array list.
Value not found in array list.
Value found in array list.
PS C:\Users\dwijd\Downloads\esfp-1 Prcticals\ESFP-1_Practicals_codes\Practical_13>
```

## Q.2.Problem Definition:

**Description: Arrange array list element.**

Make a program in C, to accept any random 5 numbers from the user in the array list. Arrange all the
accepted numbers in ascending or descending order with the help of array concept.

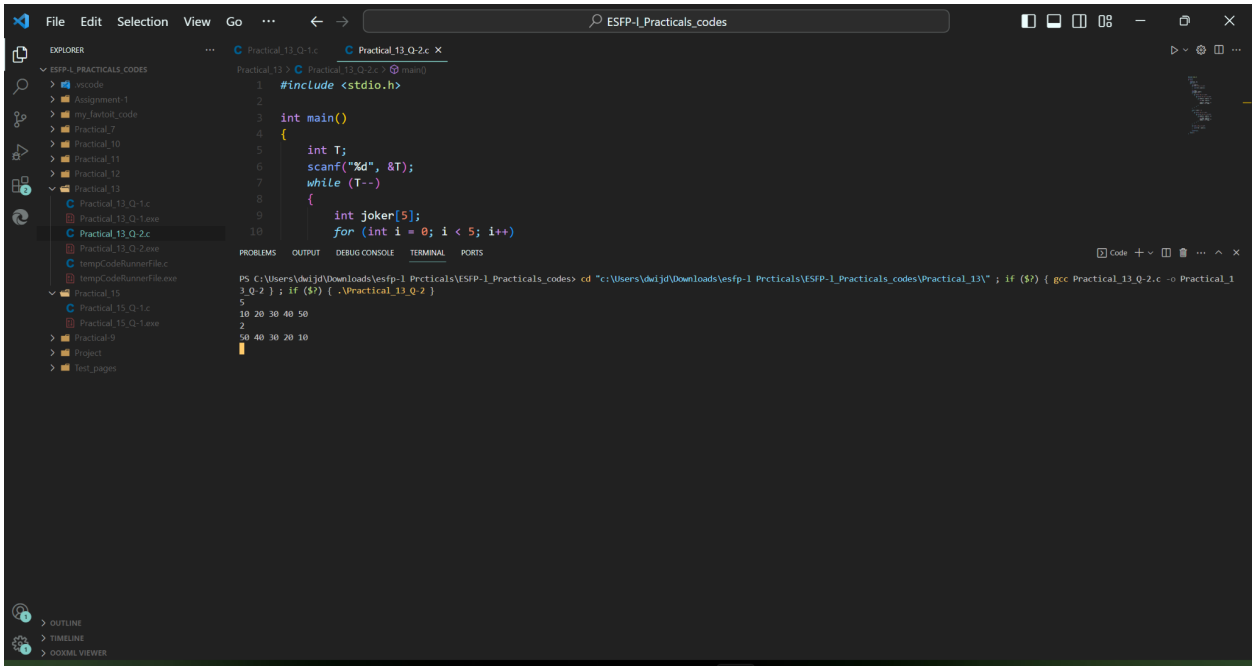
**Code:**

```c
#include <stdio.h>


int main()
```

```
{
    int T;
    scanf("%d", &T);
    while (T--)
    {
        int joker[5];
        for (int i = 0; i < 5; i++)
        {
            scanf("%d", &joker[i]);
        }

        int order;
        scanf("%d", &order);
        if (order == 1)
        {
            for (int i = 0; i < 4; i++)
            {
                for (int j = 0; j < 4 - i; j++)
                {
                    if (joker[j] > joker[j + 1])
                    {
                        int temp = joker[j];

                        joker[j] = joker[j + 1];
                        joker[j + 1] = temp;

                    }
                }
            }
        }

        else if (order == 2)
```

```
        {
            for (int i = 0; i < 4; i++)
            {
                for (int j = 0; j < 4 - i; j++)
                {
                    if (joker[j] < joker[j + 1])
                    {
                        int temp = joker[j];
                        joker[j] = joker[j + 1];
                        joker[j + 1] = temp;
                    }
                }
            }
        }

        for (int i = 0; i < 5; i++)
        {
            printf("%d ", joker[i]);
        }

        printf("\n");
    }
    return 0;
}
```

**Output:**



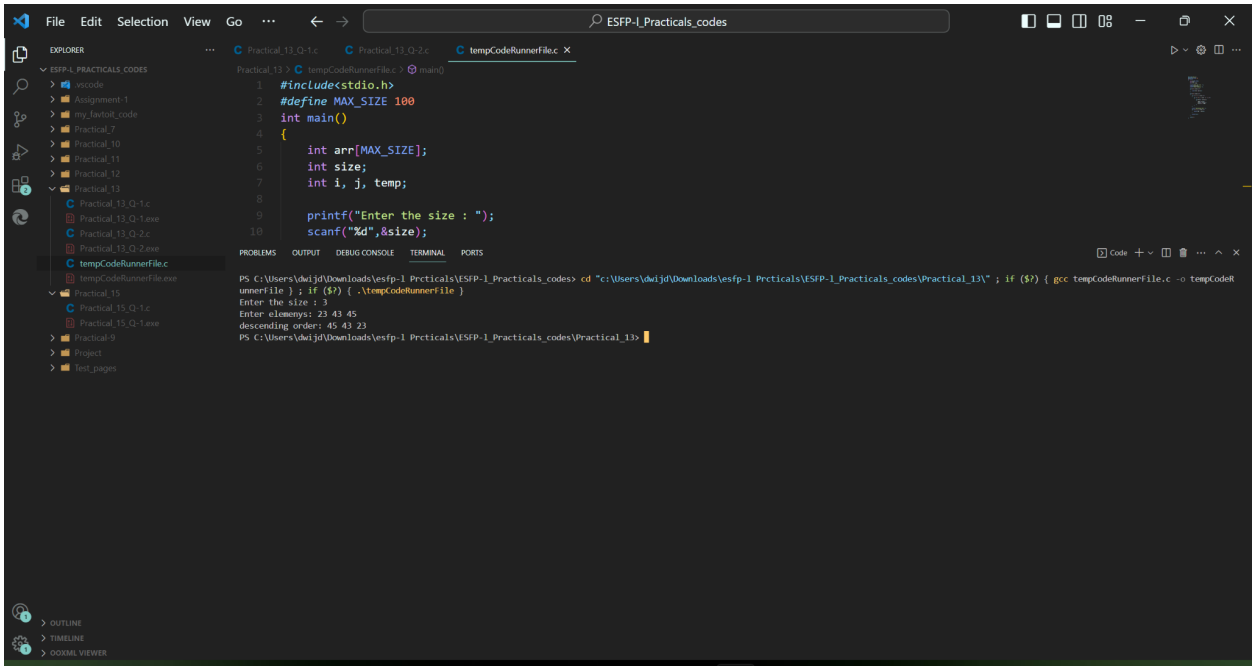

## Problem Definition-2 (descending):

## Code:

```c
#include<stdio.h>
#define MAX_SIZE 100
int main()
{
    int arr[MAX_SIZE];
    int size;
    int i, j, temp;

    printf("Enter the size : ");
    scanf("%d",&size);
    printf("Enter elemenys: ");

    for(i=0; i<size; i++)
    {
        scanf("%d", &arr[i]);
```

```
    }

    for(i=0; i<size; i++)
    {
        for (i = 0; i < size; i++)
        {
            for (j = 0; j < size - i - 1; j++)
            {
                if (arr[j] < arr[j+1])
                {
                    temp = arr[j];
                    arr[j] = arr[j+1];
                    arr[j+1] = temp;
                }
            }
        }

        printf("descending order: ");
        for (i = 0; i < size; i++)
        {
            printf("%d ", arr[i]);
        }

        printf("\n");
    }

    return 0;
}
```

**Output:**




```
PS C:\Users\dwijd\Downloads\esfp-1 Prcticals\ESFP-1_Practicals_codes> cd "c:\Users\dwijd\
unnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter the size : 3
Enter elemenys: 12 43 23
descending order: 43 23 12
PS C:\Users\dwijd\Downloads\esfp-1 Prcticals\ESFP-1_Practicals_codes\Practical_13>
```