Name – Nitin Kr. Sharma
Reg no – 12006550
Roll no – A14
Faculty – Sanjeev Kumar

## Ques – 1: Find the maximum element in the array

Ans –

```c
#include<stdio.h>

int main(){

    int arr[] =  {25, 11, 7, 99, 56};
    // calculating the length of the array
    int length = sizeof(arr)/sizeof(arr[0]);

    // maximum number in an array :
    for (int i = 0; i < length; i++) {
        if (arr[0] < arr[i]) {
            arr[0] = arr[i];
        }
    }

    printf("Maximum element in the array is : %d", arr[0]);

    return 0;
}
```

Output –

```
PS C:\Users\NitinOP\Desktop\eval 1> cd "c:\Users\NitinOP\Desktop\eval 1\" ; if
($?) { gcc Ques1.c -o Ques1 } ; if ($?) { .\Ques1 }
Maximum element in the array is : 99
```

## Ques – 2: Find the minimum element in the array

Ans –

```c
#include<stdio.h>

int main(){

    int arr[] =  {24, 11, 7, 99, 56};
    // calculating the length of the array
    int length = sizeof(arr)/sizeof(arr[0]);

    // minimum number in an array :
```

```
    for (int i = 0; i < length; i++) {
        if (arr[i] < arr[0]) {
            arr[0] = arr[i];
        }
    }

    printf("minimum element in the array is : %d", arr[0]);

    return 0;
}
```

Output –

```
PS C:\Users\NitinOP\Desktop\eval 1> cd "c:\Users\NitinOP\Desktop\eval 1\" ; if
($?) { gcc Ques2.c -o Ques2 } ; if ($?) { .\Ques2 }
minimum element in the array is : 7
```

Ques 3 - Insertion and Deletion of an element in an array

Ans –

```
#include<stdio.h>

int main(){

    int n, pos, i;
    int arr[100];
    printf("Enter the size of the array (1 to 100) : ");
    scanf("%d", &n);

    // inserting the elements in the array
    for (i = 0; i < n; i++) {
        printf("Enter the element %d : ", i + 1);
        scanf("%d", &arr[i]);
    }

    printf("\nInsertion is completed\n");

    // deleting the element in the array
    printf("Enter the element number you want to delete: \n ");
    scanf ("%d", &pos);

    if (pos >= n + 1) {
```

```
        printf ("\nDeletion is not possible in the array\n");
    } else {

    for (i = pos - 1; i < n -1; i++) {
        arr[i] = arr[i+1];
    }

    printf ("\nArray after deleting the element\n");

        // Array after deleting the element
        for (i = 0; i < n - 1; i++) {
            printf (" arr[%d] = ", i);
            printf (" %d \n", arr[i]);
        }
    }

    return 0;
}
```

Output

```
PS C:\Users\NitinOP\Desktop\eval 1> cd "c:\Users\NitinOP\Desktop\eval 1\" ; if
($?) { gcc Ques3.c -o Ques3 } ; if ($?) { .\Ques3 }
Enter the size of the array (1 to 100) : 5
Enter the element 1 : 23
Enter the element 2 : 43
Enter the element 3 : 55
Enter the element 4 : 77
Enter the element 5 : 89

Insertion is completed
Enter the element number you want to delete:
 3

Array after deleting the element
 arr[0] =  23
 arr[1] =  43
 arr[2] =  77
 arr[3] =  89
```

Ques: 4 - Search an element in an array and display its position in array.

Ans –

```c
#include<stdio.h>

// function for searching the element
int search(int arr[], int length, int target) {
        for (int i = 0; i < length; i++)
            if (arr[i] == target)
                return i;
            return -1;
    }

int main(){
    int arr[] = {32, 11, 67, 98, 56};
    int target = 98;

    // calculating the lengt of the array
    int length = sizeof(arr)/sizeof(arr[0]);

    int position = search(arr, length, target);
    if (position == -1) {
        printf("Element not found");
    }
    else {
        printf("Element found at index : %d", position);
    }

    return 0;
}
```

Output –

```
PS C:\Users\NitinOP\Desktop\eval 1> cd "c:\Users\NitinOP\Desktop\eval 1\" ; if ($?) {
gcc Ques4.c -o Ques4 } ; if ($?) { .\Ques4 }
Element found at index : 3
```