

Assignment 9

Code 1

//Write a program to copy the elements from one array to another. Let the size of both arrays be 10.

```
#include <stdio.h>

int main()
{
    int array1[10] = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10};

    int length = sizeof(array1)/sizeof(array1[0]);

    int array2[length];

    for (int i = 0; i < length; i++)
    {
        array2[i] = array1[i];
    }

    printf("Elements of Original Array : ");
    for (int i = 0; i < length; i++)
    {
        printf("%d ", array1[i]);
    }

    printf("\n");

    printf("Elements of New Array : ");
    for (int i = 0; i < length; i++)
    {
        printf("%d ", array2[i]);
    }
    return 0;
}
```

Output

```
Elements of Original Array : 1 2 3 4 5 6 7 8 9 10  
Elements of New Array : 1 2 3 4 5 6 7 8 9 10  
  
...Program finished with exit code 0  
Press ENTER to exit console. 
```

Code 2

//Write a program to print the largest and second largest element of the array. Let the size of both arrays be 10.

```
#include <stdio.h>
int main ()
{
    int n = 0, i = 0, largest1 = 0, largest2 = 0, temp = 0;

    printf ("Enter the Size of the Array : ");
    scanf ("%d", &n);

    int array[n];

    printf ("Enter the Elements : \n");

    for (i = 0; i < n; i++)
    {
        scanf ("%d", &array[i]);
    }

    printf ("The Array Elements are : \n");

    for (i = 0; i < n; i++)
    {
        printf ("%d ", array[i]);
    }

    printf ("\n");

    largest1 = array[0];
    largest2 = array[1];

    if (largest1 < largest2)
    {
        temp = largest1;
        largest1 = largest2;
        largest2 = temp;
    }

    for (int i = 2; i < n; i++)
    {
```

```

        if (array[i] > largest1)
        {
            largest2 = largest1;
            largest1 = array[i];
        }
        else if (array[i] > largest2 && array[i] != largest1)
        {
            largest2 = array[i];
        }
    }

    printf ("Largest Element of the Array = %d\n", largest1);
    printf ("Second Largest Element of the Array = %d\n", largest2);

    return 0;
}

```

Output

```

Enter the Size of the Array : 10
Enter the Elements :
11
22
33
44
55
66
77
88
99
100
The Array Elements are :
11 22 33 44 55 66 77 88 99 100
Largest Element of the Array = 100
Second Largest Element of the Array = 99

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

```