

Programming Fundamentals

Lab Task#07:

Question_01:

```
Question_01.c > main()
1  #include <stdio.h>
2  int main()
3  {
4      int size, sum = 0;
5      printf("Enter the number of values You want to enter:");
6      scanf("%d", &size);
7      int arr[size];
8      for (int i = 0; i < size; i++)
9      {
10         printf("Enter the value %d:", i + 1);
11         scanf("%d", &arr[i]);
12         sum += arr[i];
13     }
14     printf("The sum of the inputted values is %d", sum);
15     return 0;
16 }
```

C:\Windows\system32\cmd.exe

```
Enter the number of values You want to enter:5
Enter the value 1:1
Enter the value 2:2
Enter the value 3:3
Enter the value 4:4
Enter the value 5:5
The sum of the inputted values is 15
Press any key to continue . . .
```

Question_02:

```
Question_02.c > main()
1  #include <stdio.h>
2  int main()
3  {
4      int size;
5      printf("Enter the number of values You want to enter:");
6      scanf("%d", &size);
7      int arr[size];
8      for (int i = 0; i < size; i++)
9      {
10         printf("Enter the value %d :", i + 1);
11         scanf("%d", &arr[i]);
12     }
13     printf("The elements entered in reversed order are:");
14     for (int i = size - 1; i >= 0; i--)
15     {
16         printf("%d", arr[i]);
17     }
18     return 0;
19 }
20
```

```
C:\Windows\system32\cmd.exe
Enter the number of values You want to enter:5
Enter the value 1 :1
Enter the value 2 :2
Enter the value 3 :3
Enter the value 4 :4
Enter the value 5 :5
The elements entered in reversed order are:54321
Press any key to continue . . .
```

Question_03:

```
Question_03.c > main()
1  #include <stdio.h>
2  int main()
3  {
4      int size, min, max;
5      printf("Enter the number of values You want to enter:");
6      scanf("%d", &size);
7      int arr[size];
8      for (int i = 0; i < size; i++)
9      {
10         printf("Enter the value %d:", i + 1);
11         scanf("%d", &arr[i]);
12     }
13     min = arr[0];
14     max = arr[0];
15     for (int i = 0; i < size; i++)
16     {
17         if (min > arr[i])
18         {
19             min = arr[i];
20         }
21         if (max < arr[i])
22         {
23             max = arr[i];
24         }
25     }
26     printf("The minimum and maximum values inputted are %d and %d", min, max);
27     return 0;
28 }
```

C:\Windows\system32\cmd.exe

```
Enter the number of values You want to enter:5
Enter the value 1:98
Enter the value 2:13
Enter the value 3:56
Enter the value 4:99
Enter the value 5:25
The minimum and maximum values inputted are 13 and 99
Press any key to continue . . .
```

Question_04:

```
Question_04.c > main()
1  #include <stdio.h>
2  int main()
3  {
4      int size, i, max = 0;
5      printf("enter size of array:");
6      scanf("%d", &size);
7      int arr_1[size];
8      for (i = 0; i < size; i++)
9      {
10         printf("enter the element %d= ", i + 1);
11         scanf("%d", &arr_1[i]);
12         if (arr_1[i] > max)
13         {
14             max = arr_1[i];
15         }
16     }
17     int arr_2[max + 1];
18     for (i = 0; i <= max; i++)
19     {
20         arr_2[i] = 0;
21     }
22
23     for (i = 0; i < size; i++)
24     {
25         arr_2[arr_1[i]]++;
26     }
27
28     for (i = 0; i <= max; i++)
29     {
30         if (arr_2[i] > 1)
31         {
32             printf("%d occur more than once\n", i);
33         }
34     }
35 }
```

C:\Windows\system32\cmd.exe

```
enter size of array:5
enter the element 1= 6
enter the element 2= 6
enter the element 3= 3
enter the element 4= 2
enter the element 5= 1
6 occur more than once
```

Press any key to continue . . .

