

FUNDAMENTALS OF PROGRAMING

(Lab manual-8)

HOMETASK

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TASK-1: Take an array and find the most repeated element in that array

```
1  #include<iostream>
2  using namespace std;
3  int main(){
4      //Take an array and find the most repeated element in that array
5      cout<<"TASK-1"<<endl;
6
7      int x;
8      cout<<"enter the no. of elements in array: "<<endl;
9      cin>>x;
10
11     cout<<"enter the value of each element: "<<endl;
12     int arr[x];
13     for( int i=0 ; i<x ; i++){
14         cin>>arr[i];
15     }
16     int count=0;
17     cout<<"repeating no.s are: "<<endl;
18     for( int i=0 ; i<x ; i++){
19         for( int j=i+1 ; j<x ; j++){
20             if(arr[i]==arr[j]){
21                 cout<<arr[j]<<" , ";
22             }
23         }
24     }
25     return 0;
26 }
```

OUTPUT:

```
TASK-1
enter the no. of elements in array:
8
enter the value of each element:
1
1
2
3
4
5
6
5
repeating no.s are:
1 , 5 ,
-----
Process exited after 11.16 seconds with return value 0
Press any key to continue . . .
```

TASK-2: Let's say an array is a [8] = {13, 15, 17, 9, 99, 77, 65, 43}. Find largest and smallest element

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      //a[8]={13, 15, 17, 9, 99, 77, 65, 43}.Find largest and smallest element
6      cout<<"TASK-2"<<endl;
7      cout<<"array: "<<endl;
8      int arr[8] = {13,15,17,9,99,77,65,43};
9      for( int i=0 ; i<8 ; i++){
10         cout<<arr[i]<<endl;
11     }
12     int max=arr[0] , min=arr[0];
13     max = arr[0];
14     for(int i=1 ; i<8 ; i++){
15         if( max<arr[i] ){
16             max=arr[i];
17         }
18     }
19     cout<<"max:"<<max<<" ";
20
21     min = arr[0];
22     for(int i=0 ; i<8 ; i++){
23         if( min>arr[i] ) {
24             min=arr[i];
25         }
26     }
27
28     cout<<"min:"<<min<<" ";
29     return 0;
30 }
```

OUTPUT:

```
TASK-2
array:
13
15
17
9
99
77
65
43
max:99 min:9
-----
Process exited after 0.5656 seconds with return value 0
Press any key to continue . . .
```

TASK-3: Develop a program that takes 5 array elements from user. Swap position [2] element with position [4] element.

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      //Develop a program that takes 5 array elements from user. Swap position [2]
6      //element with position [4] element.
7      cout<<"TASK-3"<<endl;
8
9      int arr[5];
10     cout<<"value of 5 elements"<<endl;
11     for (int i=0;i<5;i++){
12         cin>>arr[i];
13     }
14     cout<<"array:"<<endl;
15     for (int i=0;i<5;i++){
16         cout<<arr[i]<<" ";
17     }
18     cout<<endl;
19     int temp;
20     temp=arr[4];
21     arr[4]=arr[2];
22     arr[2]=temp;
23     cout<<"swapped positions:"<<endl;
24     for (int i=0;i<5;i++){
25         cout<<arr[i]<<" ";
26     }
27     return 0;
28 }
```

OUTPUT:

```
TASK-3
value of 5 elements
1
2
3
4
5
array:
1 2 3 4 5
swapped positions:
1 2 5 4 3
-----
Process exited after 6.525 seconds with return value 0
Press any key to continue . . .
```