Arrays-2 Assignment

1Q) Count the number of elements strictly greater than x.

```
#include <iostream>
using namespace std;
int main(){
    int n,x,c=0;
cout<<"Enter size: ";
cin>>n;
int arr[n];
cout<<"Enter elements: ";
for(int i=0;i<n;i++){

cin>>arr[i];
}
```

```
cout<<"E
nter
number:
";
cin>>x;
cout<<en
dl;
for(int
i=0;i<n;
i++){

if(arr[i
]>x)
c++;
}
cout<<c;
}
```

2Q) WAP to find the largest three elements in the array.

```
#include
<iostrea
m>
#include
<climits
>
using
namespac
e std;
int
main(){
    int
n,x,c=0;
cout<<"E
nter
size: ";
cin>>n;
int
arr[n];
cout<<"E
nter
elements
: ";
```

```
for(int
i=0;i<n;
i++){

cin>>arr
[i];
}
int
max=INT_
MIN;
for(int
i=0;i<n;
i++){
    if
(arr[i]>
max)
max=arr[
i];
}
int
smax=INT
_MIN;
for(int
i=0;i<n;
i++){
    if
(arr[i]!
=max  &&
arr[i]>s
max)
{

smax=arr
[i];
    }
}


int
tmax=INT
_MIN;
for(int
i=0;i<n;
i++){

if((arr[
i]!=smax
&&arr[i]
!=max)&&
arr[i]>t
max)
```

```
tmax=arr
[i];
}
cout<<ma
x<<endl<
<smax<<e
ndl<<tma
x;
```

3Q)Check if the given array is sorted or not

```
#include<iostream>
#include<climits>
using namespace
std;
int main(){
    int
n,x,c=0,f=1;
cout<<"Enter size:
";
cin>>n;
int arr[n];
cout<<"Enter
elements: ";
for(int
i=0;i<n;i++){
    cin>>arr[i];
}
for(int
i=0;i<n;i++){
    for(int
j=i+1;j<n;i++){

if(arr[i]<arr[j]) {
            f=1;
        }
        else {
            f=0;
            break;
        }
    }
}
```

```
if(f==1)
cout<<"array is
sorted\n";
else cout<<"array
is not sorted\n";
```

4Q) Find the difference between the sum of elements at even indices to the sum of elements at odd Indices.

```
#include<iostream>
#include<climits>
using namespace
std;
int main(){
    int
n,x,s1=0,s2=0,diff=
0;
cout<<"Enter size:
";
cin>>n;
int arr[n];
cout<<"Enter
elements: ";
for(int
i=0;i<n;i++){
    cin>>arr[i];
}
for(int
i=0;i<n;i++){
    if(i%2==0)
s1=s1+arr[i];
    else
s2=s2+arr[i];
}
diff=s1-s2;
cout<<endl<<diff;



}
```

5Q) Given an array of integers, change the value of all odd

indexed elements to its second multiple and increment all even indexed values by 10.

```
#include<iostream>
using namespace
std;
int main(){
    int n,x;
cout<<"Enter size:
";
cin>>n;
int arr[n];
cout<<"Enter
elements: ";
for(int
i=0;i<n;i++){
    cin>>arr[i];
}
for(int
i=0;i<n;i++){
    if(i%2!=0)
arr[i]=2*arr[i];
    else
arr[i]=arr[i]+10;
}
cout<<"After
changes values: ";
for(int
i=0;i<n;i++){
    cout<<arr[i]<<"
";
}
}
```

6Q) Find the unique number in a given Array where all the elements are being repeated twice with one
value being unique.

```
#include<iostream>
```

```
using namespace
std;
int main(){
    int n,i=0;
    bool flag=true;
    cout<<"Enter
size: ";
    cin>>n;
    int arr[n];
    for(
i=0;i<n;i++){

cin>>arr[i];
    }
    for(int
i=0;i<n;i++){
        flag=true;
        for(int
j=0;j<n;j++){

if(i==j) continue;

if(arr[i]==arr[j]){

flag=false;

break;
            }
        }

if(flag==true){

cout<<arr[i]<<endl;
        }
  }
}
```

7Q) If an array arr contains n elements, then check if the given array is a palindrome or not .

```
#include<iostream>
using namespace
std;
int main(){
    int n,i=0;
    bool flag=true;
    cout<<"Enter
size: ";
```

```
    cin>>n;
    int arr[n];
    for(
i=0;i<n;i++){

cin>>arr[i];
    }
    i=0;
    int j=n-1;
     while(i<j){

if(arr[i]!=arr[j]){

flag=false;
            break;
        }
        i++;
        j--;
     }
     if(flag==true)
cout<<"
palindrome";
     else
cout<<"not
palindrome";
}
```

8Q)Find the error.

```
double getAverage(int arr
int main () {
int balance[5] = {1000, 2
double avg;
avg = getAverage( balance
cout << "Average value is
return 0;
}
```

Sol) as the actual parmater is int data type and formal data type is address the don't match their type.