Assignment Solutions | Arrays - 1 | Week 5

1. Calculate the product of all the elements in the given array.

Solution :

```
#include <iostream>
using namespace std;
int main() {
    int arr[5]={1,2,3,4,5};
    int pdt = 1;
    for(int i=0;i<5;i++){
    pdt = pdt*arr[i];
}
cout<<pdt;
    return 0;
}
```

2. Find the second largest element in the given Array in one pass.

Solution :

```
#include <iostream>
using namespace std;
int main() {
  int arr[6]={12 ,35, 1, 10, 29, 1};
  int max1=max2=INT_MIN;
  for(int i=0;i<5;i++){
    if(max1<a[i]){
      max2=max1;
      max1=a[i];
    }
    else if(max2<a[i] && a[i]!=max1){
      max2=a[i];
    }
  }
  if(max2==INT_MIN){
    cout<<"No second element exists"<<endl;
  }
  else  cout<<max2<<endl;
  return 0;
}
```

3. Find the minimum value out of all elements in the array.

Solution :

```
#include <iostream>
using namespace std;
int main(){
    int arr[5] = {1,2,3,4,5};
    int  min = INT_MAX;
    for(int i=0;i<5;i++){
        min = min(min,arr[i]);
     }
     cout << min;
    return 0;
}
```

4. Given an array, predict if the array contains duplicates or not.

Solution :

```
#include<iostream>
using namespace std;
int main() {
  int arr[5]={1,2,2,4,5};
  bool flag = false;
  for(int i=0;i<5;i++){
    for(int j=i+1;j<5;j++){
      if(arr[i]==arr[j]){
        flag = true;
        cout<<arr[i];
        break;
      }
    }
  }
  if(flag==false) cout << "No duplicate";
  return 0;
}
```

5. WAP to find the smallest missing positive element in the sorted Array that contains only positive elements.

Solution :

```
#include<iostream>
using namespace std;
int main() {
  cout<<"enter 5 elements of the array"<<endl;
  int a[5];
  for(int i=0;i<5;i++){
    cin>>a[i];
  }
  int x=0;
  bool flag=false;
  for(int i=0;i<n;i++){
    if(a[i]!= x){
      cout<<x<<endl;
      flag=true;
      break;
    }
    else x++;
  }
  if(flag==false) cout<<x<<endl;
  return 0;
}
```

6. Predict the output.

```
int main(){
  int sub[50], i ;
  for ( i = 0 ; i <= 48 ; i++ ) ;
  {
    sub[i] = i ;
    cout<<sub[i]<<endl ;
  }
  return 0;
}
```

Solution :

```
49
```
