



COMPUTER ENGINEERING DEPARTMENT

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LABORATORY EXERCISE #4
DATA STRUCTURE AND ALGORITHM ANALYSIS LAB.
2nd Semester S.Y. 2018 – 2019

NAME: _____

SCHEDULE: _____

COURSE & YEAR: _____

DATE: _____

General Direction: Create a C++ program that will satisfy the required output. Encode each of the program and illustrate the result.

Program No.1(save as arrex1)

```
//initialized array example using quiz scores
#include<iostream.h>
#include<conio.h>
int johneric[]={34,20,13,40,50};
int n, result=0;
int main()
{
    for (n=0 ; n<5 ; n++)
        result ++ johneric[n];
    cout<<"The average score of johneric is "<<(result/5);
    getch();
    return 0;
}
```

Program No.2(save as arrex2)

```
// arrays as parameters
#include<iostream.h>
#include<conio.h>
void print array (int arg[],int length)
{
    for(int n=0;n<length;n++)
        cout<<arg[n]<<" ";
    cout<<"\n";
}
int main()
{
    int firstarray[]={5,10,15};
    int secondarray[]={2,4,6,8,10};
    printarray(firstarray,3);
    printarray(secondarray,5);
    getch();
    return 0;
}
```



Program No. 3(save as arrex3)

```
// This program illustrate the use of arrays in sorting
#include<iostream.h>
#include<conio.h>
int sort_max(int num[5])
{
    int maxval,Pos, maxpos;
    maxval=num[0];
    maxpos=0;
    for(Pos=1, Pos<5;Pos++)
        if(num[Pos]>maxval)
        {
            maxval=num[Pos];
            maxpos=Pos;
        }
    cout<<"The largest integers is the integer no. "<<(maxpos+1)<<endl;
    return maxval;
}
```

Program No.4(save as arrex4)

```
//This program illustrate the multidimensional array
#include<iostream.h>
#include<conio.h>
void main()
{
    int i,j;
    int seat[3][3]={0,0,1},{1,0,1},{1,1,0}};
    cout<<"Seats"<<endl;
    for(i=0;i<3;i++)
        for(j=0;j<3;j++)
            {cout<<seat[i][j]<<"\t";
             if(j==2)
                 cout<<"\n";
            }
    cout<<endl;
    for(i=0;i<3;i++)
        for(j=0;j<3;j++)
            if(seat[i][j] == 1)
                cout<<"How"<<(i+1)<<"Column"<<(j+1)<<"seat is occupied" <<endl;
    getch();
}
```