**Task 1:**

**Code:**

#include <iostream>

using namespace std;

void input(int A[],int n)

{

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

cin>>A[i];

}

void printArray(int A[],int n)

{

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

cout<<A[i]<<" ";

}

void revArray(int A[],int n)

{

int x=n;

for(int i=0;i<n/2;i++)

{

int temp=A[i];

A[i]=A[--x];

A[x]=temp;

}

}

int main()

{

int Size;

cout<<"Array Size: ";

cin>>Size;

int Array[Size];

cout<<"Array content: \n";

input(Array,Size);

cout<<"Array before Reversing: ";

printArray(Array,Size);

revArray(Array,Size);

cout<<"\nArray after Reversing: ";

printArray(Array,Size);

return 0;

}

**Task 2:**

**Code:**

#include <iostream>

#include <string.h>

using namespace std;

struct student{

char name[50];

int age;

float cgpa;

student(){;}

student(char n[50],int a,float c){

int i=0;

for(;\*(n+i);i++)

{

\*(name+i)=\*(n+i);

}

\*(name+i)='\0';

age=a;

cgpa=c;

}

void show();

};

void student::show(){

cout<<"Name: ";

cout<<name;

cout<<"\nAge: "<<age<<endl;

cout<<"CGPA: "<<cgpa<<endl;

}

int main()

{

student s1("Shah Raza",20,2.9),s2;

strcpy(s2.name,"Ali Bhai");

s2.age=21;

s2.cgpa=3.5;

s1.show();

s2.show();

return 0;

}

**Task 3:**

**Code:**

#include <iostream>

#include <cstdlib>

using namespace std;

int main()

{

int Size;

cout<<"Array Size: ";

cin>>Size;

int Array[Size];

for(int i=0;i<Size;i++)

{

\*(Array+i)=rand()%100;

cout<<\*(Array+i)<<" ";

}

int Max=\*(Array);

for(int i=0;i<Size;i++)

{

if (\*(Array+i)>Max)

Max=\*(Array+i);

}

cout<<"\nLargest number: "<<Max;

return 0;

}

**Task 4:**

**Code:**

#include <iostream>

using namespace std;

int main()

{

int cols,rows;

cout<<"Matrix Length: ";

cin>>rows>>cols;

int Array[rows][cols];

cout<<"Matrix Content: ";

for(int r=0;r<rows;r++)

{

for (int c=0;c<cols;c++)

cin>>\*(\*(Array+r)+c);

}

for(int c=0;c<cols;c++)

{

for(int r=0;r<rows;r++)

cout<<\*(\*(Array+r)+c);

cout<<"\n";

}

return 0;

}