CAU 1:

#include<iostream>

using namespace std;

void nhapmang(int a[], int& n){

cout<<"Nhap n: ";

cin>>n;

cout<<"Nhap mang:\n";

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

cout<<"a["<<i<<"]= ";

cin>>a[i];

}

}

void XuatMang(float a[], int n)

{

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

cout << a[i] << " ";

}

void songuyenamchiahetcho5(int a[], int n){

cout<<"\nCac phan tu chia het cho -5 la: ";

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

if(a[i]%(-5)==0){

cout<<a[i]<<" ";

}

}

}

int tongsonguyenduongkhongchiahetcho3(int a[], int n){

int S=0;

cout<<"\ntong so nguyen duong khong chia het cho 3 la: ";

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

if(a[i]>0 && a[i]%3!=0 )

S=S+a[i];

}

return S;

}

int tinhtong(int a[], int n){

int tong=0;

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

tong=tong+a[i];

}

return tong;

}

void manglonhontong(int a[], int n){

cout<<"\nso nguyen lon hon tong cac phan tu trong mang: ";

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

if(a[i]>tinhtong(a,n))

cout<<a[i]<<" ";

}

}

int main(){

int a[100], n;

nhapmang(a,n);

songuyenamchiahetcho5(a,n);

cout<<tongsonguyenduongkhongchiahetcho3(a,n);

cout<<"\nTong cac so trong mang la: ";

cout<<tinhtong(a,n);

manglonhontong(a,n);

}

CAU 2

#include<iostream>

#include<time.h>

#include<cstdlib>

using namespace std;

void nhapMang(int a[], int &n)

{

cout << "Nhap so luong phan tu n : ";

cin >> n;

srand(time(0));

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

a[i]=rand()%100;

}

void xuatmang(int a[], int n)

{

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

cout<<a[i]<<" ";

}

void daonguocchieu(int a[],int n)

{

for(int i=n-1; i>=0; i--)

cout<<a[i]<<" ";

}

int main(){

int a[100], n;

nhapMang(a,n);

xuatmang(a,n);

cout<<"\nMang dao nguoc la: ";

daonguocchieu(a,n);

}

CAU 3

#include<iostream>

using namespace std;

void nhapmang(int a[], int& n){

cout<<"Nhap n: ";

cin>>n;

cout<<"Nhap mang:\n";

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

cout<<"a["<<i<<"]= ";

cin>>a[i];

}

}

void XuatMang(int a[], int n)

{

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

cout << a[i] << " ";

}

int kiemtramangdoixung(int a[],int n){

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

if(a[i]=a[n-i-1])

return 1;

}

return 0;

}

int main(){

int a[100], n;

nhapmang(a,n);

if(kiemtramangdoixung(a,n)==1)

cout<<"Mang doi xung";

else

cout<<"Mang khong doi xung";

}

CAU 4

#include<iostream>

using namespace std;

void nhapmang(int a[], int& n){

cout<<"Nhap n: ";

cin>>n;

cout<<"Nhap mang:\n";

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

cout<<"a["<<i<<"]= ";

cin>>a[i];

}

}

void xuatmang(int a[], int n)

{

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

cout << a[i] << " ";

}

void sapxeptangdan(int a[], int n){

int x;

for(int i=0; i<n-1; i++)

for(int j=i+1; j<n; j++){

if(a[i]>a[j]){

x=a[i];

a[i]=a[j];

a[j]=x;

}

}

}

int timnhiphan(int a[] , int n , int x)

{

int l = 0 , r = n - 1 , m;

while (l<=r)

{

m = (l+r)/2;

if(a[m] == x)

return m;

if(a[m]<x)

l = m+1;

else

r = m-1;

}

return -1;

}

int main(){

int a[100], n,x;

nhapmang(a,n);

sapxeptangdan(a,n);

xuatmang(a,n);

cout<<"\nNhap x: ";

cin>>x;

if ( timnhiphan(a,n,x) == -1)

cout<<timnhiphan(a,n,x);

else

cout<<"Tim duoc phan tu x tai vi tri: "<<timnhiphan(a,n,x);

}