

```
#include<stdio.h>

#include<conio.h>

#include<iostream>

using namespace std;

void NhapMang(int a[], int &n);

void XuatMang(int a[], int n);

void TongCacPhanTu(int a[], int n);

void TimMax(int a[], int n);

void TimMin(int a[], int n);

void TrungBinhCacPhanTu(int a[], int n);

void NhapMang_NguyenDuong(int a[], int &n);

void NhapMang_TheoDieuKien(int a[], int &n);

void KiemTra_0(int a[], int n);

void KiemTra_Chan(int a[], int n);

void KiemTra_Le(int a[], int n);

void DayTang(int a[],int n);

void DayGiam(int a[],int n);

void SapXepTang(int a[], int n);

void SapXepGiam(int a[], int n);

void Xoa_1_PhanTu(int a[],int &vtriXoa, int &n);
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void Xoa_d_PhanTu(int a[],int &vtriXoa,int &d, int &n);
```

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int main()
```

```
{
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    int a[50], n, vtriXoa, d;
```

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    NhapMang_TheoDieuKien(a,n);
```

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    XuatMang(a,n);
```

```
    Xoa_1_PhanTu(a,vtriXoa,n);
```

```
    XuatMang(a,n);
```

```
    Xoa_d_PhanTu(a,vtriXoa,d,n);
```

```
    XuatMang(a,n);
```

```
    getch();
```

```
    return 0;
```

```
}
```

```
void NhapMang(int a[], int &n)
```

```
{
```

```
    cout<<"\n Nhap vao so phan tu cua mang ";cin>>n;
```

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

```
        cout<<"Nhap a["<<i<<" ] = ";
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        cin>>a[i];

    }

}

void XuatMang(int a[], int n)

{

    cout<<"\n Mang cua ban vua nhap la ";

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

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

}

// Tim Tong Cac Phan Tu Trong Mang

void TongCacPhanTu(int a[], int n)

{

    int s=0;

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

        s=s+a[i];

    cout<<"\nTong Mang = "<<s;

}

void TimMax(int a[], int n)

{

    int max = a[0];

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        for(int i=1;i<n;i++)
            if(max<a[i]) max=a[i];
        cout<<"\nMax Mang = "<<max;
    }

void TimMin(int a[], int n)
{
    int min = a[0];
    for(int i=1;i<n;i++)
        if(min>a[i]) min=a[i];
    cout<<"\nMin Mang = "<<min;
}

void TrungBinhCacPhanTu(int a[], int n)
{
    int s=0;
    for(int i=0;i<n;i++)
        s=s+a[i];

    //ép kiểu float để chia lấy phần thập phân

    cout<<"\nTrung Binh Mang = "<<float(s)/(float)n;
}

```

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void NhapMang_NguyenDuong(int a[], int &n)
{
    cout<<"\n Nhap vao so phan tu cua mang ";cin>>n;
    for(int i=0;i<n;i++)
    {
        do{
            cout<<"Nhap a["<<i<<" ] = ";
            cin>>a[i];
        }while(a[i]<0);
    }
}

```

```

void NhapMang_NguyenAm(int a[], int &n)
{
    cout<<"\n Nhap vao so phan tu cua mang ";cin>>n;
    for(int i=0;i<n;i++)
    {
        do{
            cout<<"Nhap a["<<i<<" ] = ";
            cin>>a[i];
        }while(a[i]>0);
    }
}

```

```

    }

}

void NhapMang_TheoDieuKien(int a[], int &n)
{
    n=-1;
    do{
        n++;
        cout<<"Nhap a["<<n<<"] = ";
        cin>>a[n];
    }while(a[n]!=99);
}

void KiemTra_0(int a[], int n)
{
    int dem = 0;
    for(int i=0;i<n;i++)
        if(a[i]==0) dem++;

    if(dem==0) cout<<"\nKhong co so 0 nao trong day
vua nhap";

    else cout<<"\nCo "<<dem<<" so 0 trong day vua nhap";
}

void KiemTra_Chan(int a[], int n)

```

```

{
    int dem = 0;

    for(int i=0;i<n;i++)
        if(a[i]%2==0)    dem++;

    if(dem==0)    cout<<"\nKhong co so chan nao trong
day vua nhap";

    else cout<<"\nCo "<<dem<<" so chan trong day vua
nhap";
}

void KiemTra_Le(int a[], int n)
{
    int dem = 0;

    for(int i=0;i<n;i++)
        if(a[i]%2==1)    dem++;

    if(dem==0)    cout<<"\nKhong co so le nao trong day
vua nhap";

    else cout<<"\nCo "<<dem<<" so le trong day vua
nhap";
}

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

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    int ktTang = 1;
    for(int i=0;i<n-1;i++)
    {
        if(a[i+1]-a[i]<0) ktTang = 0;
    }
    if(ktTang==0)    cout<<"\nDay Binh Thuong";
    else cout<<"\n Day Tang";

}

void DayGiam(int a[],int n)
{
    int ktGiam = 1;
    for(int i=0;i<n-1;i++)
    {
        if(a[i+1]-a[i]>0) ktGiam = 0;
    }
    if(ktGiam==0)    cout<<"\nDay Binh Thuong";
    else cout<<"\n Day Giam";
}

void HoanVi(int &a, int &b)

```



```

{
    int tam = a;
    a=b;
    b=tam;
}

void SapXepTang(int a[], int n)
{
    for(int i=0;i<n-1;i++)
        for(int j=i+1;j<n;j++)
            if(a[i]>a[j])    HoanVi(a[i],a[j]);
    cout<<"\n Mang cua ban sau khi sap xep tang la ";
    for(int i=0;i<n;i++)
        cout<<a[i]<<" ";
}

void SapXepGiam(int a[], int n)
{
    for(int i=0;i<n-1;i++)
        for(int j=i+1;j<n;j++)
            if(a[i]<a[j])    HoanVi(a[i],a[j]);
    cout<<"\n Mang cua ban sau khi sap xep giam la ";
}

```