```cpp
#include <iostream>

using namespace std;

float a,b,s,d;

unsigned long i,n,di,si;

unsigned long x;

int n1,ok;

int n2,ogl,pal;

int a1,b1,i1,a2,b2;

long f,p,z,nf;

int nr1,nr2,nr3,nr4,nrtot,maxnr,minnr;

int main()

{ cout<<"Alege-ti algoritmul";

 cout<<endl<<"1.Suma si Diferenta dintre 2 numere";

 cout<<endl<<"2.Divizorii unui numar n si suma lor.";

 cout<<endl<<"3.Daca un numar N este prim sau nu.";

 cout<<endl<<"4.Oglindit si palindrom";

 cout<<endl<<"5.Sirul lui Fibonacci";

 cout<<endl<<"6.Divizorul comun a 2 nr";

 cout<<endl<<"7.Intervalul a,b";

 cout<<endl<<"8.Max/min 4 nr";

 cout<<endl<<"9.Nr perfect"<<"\n";

 cin>>x;

 if(x==1)

 { cout<<endl<<endl<<"---Alege-ti 2 numere---"; cout<<endl;

  cin>>a>>b;

  s=a+b;

  d=a-b;
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   cout<<endl<<"Suma lor este:"<<s;

   cout<<endl<<"Diferenta lor este:"<<d;

}

if(x==2)

{ cout<<endl<<endl<<"---Alege un numar n---"; cout<<endl;

   cin>>n;

   cout<<"Divizorii sai sunt: ";

   for(i=1;i<=n;i++)

   {

      if(n%i==0)

      {cout<<i<<" ";si=si+i;}

   }

      cout<<endl<<"Suma divizorilor sai sunt: "<<si;

      if(si-n==n)

         cout<<endl<<"Este numar perfect";

      else

         cout<<endl<<"Nu este numar perfect";

}


if(x==3)

{

      cout<<endl<<endl<<"---Alege un numar n---"<<endl; cout<<endl;

      cin>>n1;ok=1;

      for(di=2;di<=n1/2;di++)

      {if(n1%di==0)

       ok=ok+1;
```

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      }
      cout<<endl;
      if(ok==1) cout<<"Este prim";
      else cout<<"Nu este prim";
   }
   if(x==4)
   {cout<<endl<<endl<<"---Alege un numar n pentru a afla oglinditul sau---"; cout<<endl;
    cin>>n2;pal=n2;
    while(n2!=0)
    {
       ogl=ogl*10+n2%10;
       n2=n2/10;


    }
cout<<endl<<"Ogl=  "<<ogl;
if(ogl==pal)
   cout<<endl<<"Este palindrom" ;
else
   cout<<endl<<"Nu este palindrom";
 }
 if(x==7)
 {
    cout<<endl<<endl<<"Alegeti intervalul [a,b] pentru a afla ce numere se afle in el";
    cout<<endl;
    cin>>a1>>b1;


      while(a1<=b1 )
```

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        {
        cout<<a1<<" ";
        a1=a1+1;
        }
    }
 if(x==6)
 {
        cout<<endl<<"Divizorul comun dintre 2 numere";
        while (a!=b)
     if (a>b)
      a=a-b;
     else
      b=b-a;


    }
 if(x==5)
 {cout<<"ati ales sirul lui Fibo";
 cin>>nf;
     p=z=1;
cout<<z<<" "<<p<<endl;
for(i=3;i<=nf;i++)
{
f=p+z;
cout<<f<<endl;
z=p;
p=f;
 }
```

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; }
if(x==8)
{
    cout<<"Ati ales alg 8 cu max/min";
    cin>>nrtot;
    maxnr=1;minnr=100000;
    cout<<endl;
    while(nrtot!=0)
    {
        cin>>nr1; nrtot--;
        if(nr1>maxnr) maxnr=nr1;
        if(nr1<minnr) minnr=nr1;
    }
    cout<<"Max"<<maxnr<<endl;
    cout<<"Min"<<minnr<<endl;
}
if(x==9)
{
 cout<<"n=";cin>>n;
 for(d=2;d<=n/2;d++)
 if(n%d==0) s=s+d;
 cout<<s<<endl;
 if(s==n) cout<<"nr perfect";
 else cout<<"nu este nr perfect"
}

return 0;
```

}