

A

```
#include <iostream>
#include <cmath>
using namespace std;
int main()
{
    int a,b,P=99999,S;
    cin>>S;
    for(a=1;a<sqrt(S);a++)
    {
        if(S%a==0)
        {
            b=S/a;
            if(2*a+2*b<P)
                P=2*a+2*b;
        }
    }
    cout<<P<<endl;
    return 0;
}
```

B

```
#include <iostream>
using namespace std;
int main()
{
    int a[3],b[3],br=0;
    for(int i=0;i<3;i++)
    {
        char c; cin>>c;
        cin>>a[i];
        if(c=='a') b[i]=0;
        if(c=='b') b[i]=1;
        if(c=='c') b[i]=2;
        if(c=='d') b[i]=3;
        if(c=='e') b[i]=4;
        if(c=='f') b[i]=5;
        if(c=='g') b[i]=6;
        if(c=='h') b[i]=7;
    }
    int x[8][8];
    for(int i=0;i<8;i++)
    for(int j=0;j<8;j++) x[i][j]=0;
    for(int i=0;i<8;i++)
    for(int j=0;j<3;j++) x[b[j]][i]=1;
    for(int i=0;i<8;i++)
    for(int j=0;j<3;j++) x[i][a[j]-1]=1;
    for(int i=0;i<8;i++)
    for(int j=0;j<8;j++) if(x[i][j]==0)
        br++;
    cout<<br<<endl;
    return 0;
}
```

C

```
#include <iostream>
using namespace std;
int main()
{
    int m,n,br=0,i1,i2,i3,i4,i5;
    cin>>m>>n;
    for(int i=m;i<=n;i++)
    {
        i1=i/10000%10;
        i2=i/1000%10;
        i3=i/100%10;
        i4=i/10%10;
        i5=i%10;
        if(i1+i2==i3 && i3==i4+i5) br++;
    }
    cout<<br<<endl;
    return 0;
}
```

D

```
#include <iostream>
using namespace std;
int main()
{
    int a,b,c,P,br=0;
    cin>>P;
    for(a=1;a<=P-2;a++)
    for(b=1;b<=P-a-1;b++)
    {
        c=P-a-b;
        if(a<b+c && b<a+c && c<a+b)
            br++;
    }
    cout<<br/3<<endl;
    return 0;
}
```

E

```
#include <iostream>
#include <cmath>
using namespace std;
int main()
{
    int a,b,c,d,min=999;
    cin>>a>>b>>c>>d;
    if(abs(a*10+b-(10*c+d))<min)
        min=abs(a*10+b-(10*c+d));
    if(abs(a*10+b-(10*d+c))<min)
        min=abs(a*10+b-(10*d+c));
    if(abs(a*10+c-(10*b+d))<min)
        min=abs(a*10+c-(10*b+d));
    if(abs(a*10+c-(10*d+b))<min)
        min=abs(a*10+c-(10*d+b));
    if(abs(a*10+d-(10*b+c))<min)
        min=abs(a*10+d-(10*b+c));
    if(abs(a*10+d-(10*c+b))<min)
        min=abs(a*10+d-(10*c+b));
    if(abs(b*10+a-(10*c+d))<min)
        min=abs(b*10+a-(10*c+d));
    if(abs(b*10+a-(10*d+c))<min)
        min=abs(b*10+a-(10*d+c));
    if(abs(b*10+c-(10*a+d))<min)
        min=abs(b*10+c-(10*a+d));
    if(abs(b*10+c-(10*d+a))<min)
        min=abs(b*10+c-(10*d+a));
    if(abs(b*10+d-(10*a+c))<min)
        min=abs(b*10+d-(10*a+c));
    if(abs(b*10+d-(10*c+a))<min)
        min=abs(b*10+d-(10*c+a));
    if(abs(c*10+a-(10*d+b))<min)
        min=abs(c*10+a-(10*d+b));
    if(abs(c*10+b-(10*d+a))<min)
        min=abs(c*10+b-(10*d+a));
    if(abs(d*10+a-(10*c+b))<min)
        min=abs(d*10+a-(10*c+b));
    if(abs(d*10+b-(10*c+a))<min)
        min=abs(d*10+b-(10*c+a));
    cout<<min<<endl;
    return 0;
}
```

F

```
#include <iostream>
using namespace std;
int main()
{
    int br=0,i1,i2,i3,i4,m,n;
    cin>>m>>n;
    for(int i=m;i<=n;i++)
    {
        i1=i/1000;
        i2=i/100%10;
        i3=i/10%10;
        i4=i%10;
        if(i==i1+i2*i2+i3*i3+i4*i4*i4)
            br++;
    }
    cout<<br<<endl;
    return 0;
}
```