

```
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// Intermediate 5, Unirea National College - Romania
// 11 grade
#include <bits/stdc++.h>
using namespace std;
ifstream fin("in.in");
ofstream fout ("output.out");
int a[3],b[3],markers[3], val[52];

int prim(int a)
{
    int i;
    if(a<=1)
        return 0;
    if(a==2)
        return 1;
    if(a%2==0)
        return 0;
    else
    {
        for(i=3; i*i<=a; i=i+2)
        {
            if(a%i==0)
                return 0;
        }
        return 1;
    }
}

int main()
{
```

```

int n,i,j,k,z,y,x,zar;
for(int l=1;l<=5;l++)
{

fin>>a[1]>>a[2]>>a[3]>>b[1]>>b[2]>>b[3]; // citesc markere-le

val[a[1]]=1; // pun pozitiile markere-lor pe joc
val[a[2]]=1;
val[a[3]]=1;
val[b[1]]=1;
val[b[2]]=1;
val[b[3]]=1;

for(i=1; i<3; i++)
{
    for(j=i+1; j<=3; j++)
    {
        if(a[i]>a[j])
            swap(a[i],a[j]);
        if(b[i]>b[j])
            swap(b[i], b[j]);

    }
}
if(min(a[1],b[1])==a[1])
{
    markers[1]=a[1];
    markers[2]=a[2];
    markers[3]=a[3];
}

```

```
if(min(a[1],b[1])==b[1])
{
    markers[1]=b[1];
    markers[2]=b[2];
    markers[3]=b[3];
}
```

```
fin>>n;
```

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

```
{
    fin>>zar;
```

```
int ct=0;
```

```
if(val[markers[1]+zar]==0)
```

```
{
```

```
    val[markers[1]]=0; // voi muta primul marker
```

```
    markers[1]=markers[1]+zar;
```

```
    val[markers[1]]=1;
```

```
if(prim(markers[1])==1) // daca ajunge pe o pozitie prima
```

```
{
```

```
    for(j=markers[1]+1; j<=markers[1]+5; j++)
```

```
    {
```

```
        if(val[j]==1)
```

```
            break;
```

```
            ct++;
```

```
    }
```

```
    val[markers[1]]=0; // voi muta primul marker
    markers[1]=markers[1]+ct;
    val[markers[1]]=1;
}
```

```
if(sqrt(markers[1])==int(sqrt(markers[1])))
{
```

```
    for(j=markers[1]-1; j>=markers[1]-6; j--)
```

```
    {
```

```
        if(val[j]==1)
```

```
            break;
```

```
            ct++;
```

```
    }
```

```
    val[markers[1]]=0; // voi muta primul marker
```

```
    markers[1]=markers[1]-ct;
```

```
    val[markers[1]]=1;
```

```
}
```

```
}
```

```
for(k=1; k<3; k++)
```

```
{
```

```
    for(j=k+1; j<=3; j++)
```

```
    {
```

```
        if(markers[k]>markers[j]) swap(markers[k],markers[j]);
```

```
    }
```

```
}
```

```
}  
    fout<<markers[1]<<" "<<markers[2]<<" "<<markers[3]<<"\n";  
  
}  
  
}
```