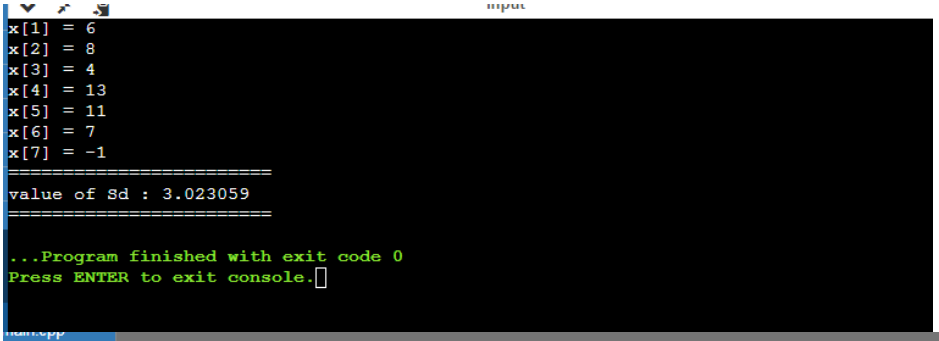
```
//CHONTHICHA PHUANGFUEANG
#include<math.h>
#include<stdio.h>
int main()
{
   int i,n;
   float value[120],deviation,sum,sumsqr,mean,variance,stddeviation;
   sum=sumsqr=n=0;
   for(i=1;i<120;i++)
   {
      printf("x[%d] = ",i);
      scanf("%f",&value[i]);
      if(value[i] == -1)
      break;
      sum+=value[i];
      n+=1;
   }
   mean=sum/(float)n;
   for (i=1;i<=n;i++)
   {
      deviation=value[i]-mean;
      sumsqr+=deviation*deviation;
   }
   variance=sumsqr/(float)n ;
   stddeviation=sqrt(variance) ;
   printf("========================\n");
```

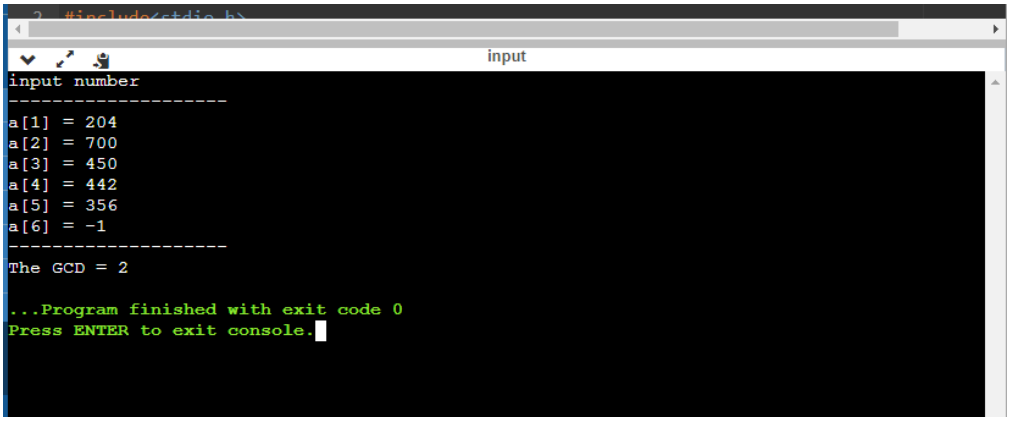
```
    printf("value of Sd : %f\n",stddeviation);
    printf("========================");
}
```




```c
//CHONTHICHA PHUANGFUEANG
#include<stdio.h>
#include<math.h>
int main()
{
   int i,n;
   float value[120],deviation,sum,sumsqr,mean,variance,stddeviation;
   sum=sumsqr=n=0;
   for(i=1;i<120;i++)
   {
      printf("x[%d] = ",i);
      scanf("%f",&value[i]);
      if(value[i] == -1)
      break;
      sum+=value[i];
      n+=1;
   }
   mean=sum/(float)n;
   for (i=1;i<=n;i++)
   {
      deviation=value[i]-mean;
      sumsqr+=deviation*deviation;
   }
   variance=sumsqr/(float)n ;
   stddeviation=sqrt(variance) ;
   printf("========================\n");
   printf("value of Sd : %f\n",stddeviation);
   printf("========================");
}
```

EXTRA

```
//CHONTHICHA PHUANGFUEANG
#include<stdio.h>
int x(int,int);
int main()
{
    printf("input number\n");
    printf("--------------------\n");
    int a[120];
    int b=a[0];
    for(int i=1;i<120;i++)
        {
            printf("a[%d] = ",i);
            scanf("%d",&a[i]);
            if(a[i]<0)
            break;
            b=x(a[i],b);
        }
    printf("--------------------\n");
    printf("The GCD = %d",b);
}
int x(int a,int b)
{
    if(b==0)
    return a;
    return x(b,a%b);
}
```



main.cpp

```cpp
//CHONTHICHA PHUANGFUEANG
#include<stdio.h>
int x(int,int);
int main()
{
    printf("input number\n");
    printf("--------------------\n");
    int a[120];
    int b=a[0];
    for(int i=1;i<120;i++)
        {
            printf("a[%d] = ",i);
            scanf("%d",&a[i]);
            if(a[i]<0)
            break;
            b=x(a[i],b);
        }
    printf("--------------------\n");
    printf("The GCD = %d",b);
}
int x(int a,int b)
{
    if(b==0)
    return a;
    return x(b,a%b);
}
```