

WAP to find HCF & LCM of 'n' integers

```
#include <conio.h>
```

```
int main()
```

```
{
```

```
    long long int i,j,n,a,b,c,d;
```

```
    printf("\n\t\t\t\t\tTo find HCF & LCM of 'n' integer numbers enter 'n'. ");
```

```
    scanf("%lli",&n);
```

```
    long long int number[n];/*contains all input numbers*/
```

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

```
    {
```

```
        printf("\n\t\t\t\t\tEnter %lli th number: ",i+1);
```

```
        scanf("%lli",&number[i]);
```

```
    }
```

```
    a = number[0];
```

```
    b = number[0];
```

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

```
    {
```

```
        if (b>number[i]) b=number[i];/*find smallest number in array*/
```

```
        if (a<number[i]) a=number[i];/*find greatest number in array*/
```

```
    }
```

```
    c=0;
```

```
    j=b;
```

```
    do
```

```
    {
```

```
        d=0;
```

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

```
        {
```

```
            if (number[i]%j!=0) break;
```

```
            else d++;
```

```
        }
```

```
        if (d==n)
```

```
        {
```

```
            printf("-----");
```

```
-----");
```

```
            printf("\n\t\t\t\t\tHCF = %lli\n",j);
```

```
            printf("-----");
```

```
-----");
```

```
            c=1;
```

```
        }
```

```
        j--;
```

```

}
while(c!=1);
c=0;
j=1;
do
{
    b=0;
    for(i=0; i<n; i++)
    {
        if ((a*j)%number[i]!=0) break; /*In LCM n1*a1=n2*a2=n3*a3.*/
        else b++;
    }
    if (b==n)
    {
        printf("\n\t\t\t\t\tLCM = %lli\n",a*j);
        printf("-----");
        -----");
        c=1;
    }
    j++;
}
while(c!=1);
}

```