

{

```
long long int a,b,c=2,i;
```

```
printf("\n\t\t\t\t\tTo find prime factors of a number enter the number: ");
```

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

```
printf("\n\t\t\tPrime factors are: \n");
```

```
if (a%2==0) b=a/2;
```

```
else b=(a-1)/2;
```

```
for(i=0; i<=b; i++)/*find prime factorization of all numbers in array (Unique factorization)*/
```

{

**if (a%c==0)**

{

**a=a/c;**

```
printf("\t\t\t\t\t\t\t%lli\n",c);
```

```
c=1;/*find repeated prime factor (Unique factorization)*/
```

}

**C++;**

```
if (a==1) break;
```

}

```
return 0;
```

}