```
//The least common multiple of two numbers is the smallest number that
is
//exactly divisible by both of them without any remainder.

#include<stdio.h>
int main() {
   int n1, n2, max, i, lcm=1;
   //lcm variable  can also be initialised by 0 as well
   // Between 4 and 12, 12 is the smallest number that is divisible by
both
   //4 and 12. So the LCM of 4 and 12 is 12
   n1=12;
   n2=4;

//so we first find the max
   if(n1 > n2)
      max = i = n1;
   else
      max = i= n2;

   while(1) {
      if(i%n1 == 0 && i%n2 == 0) {
        //max=i=12;
        //since 12%12==0 && 12%4==0, so condition is true,
                //so we assign lcm=i and   break
         lcm = i;
         break;
      }

      i += max;
   }
   printf("The lcm %d", lcm);
}*/



//The least common multiple of 4 and 13 is the smallest number that is
//exactly divisible by both of them without any remainder.
//LCM of 4 and 13 is 52

#include<stdio.h>
int main() {
   int n1, n2, max, i, lcm=1;
   //lcm variable  can also be initialised by 0 as well
   // Between 4 and 13, 52 is the smallest number that is divisible by
both
   //4 and 13. So the LCM of 4 and 13 is 52
   n1=13;
   n2=4;

//so we first find the max
   if(n1 > n2)
      max = i = n1;    //max=i=13;
   else
      max = i= n2;
```

```
   while(1) {
      if(i%n1 == 0 && i%n2 == 0) {
        // i=13
        // iteration 1: since 13%13==0 && 13%4!=0, so condition false,
so if is not executed
        // iteration 2: since 26%13==0 && 26%4!=0, so condition false,
so if is not executed
                //iteration 3: since 39%13==0 && 39%4!=0, so condition
false, so if is not executed
                //iteration 4: since 52%13==0 && 52%4==0, so condition
true, so if is  executed and break
                 lcm = i;
         break;
      }

      i += max;   //i=13+13=26
                  //i=26+13=39
                  //i=39+13=52
   }
   printf("The lcm %d", lcm);
}
```