WRITE A PROGRAM TO FIND THE GCD AND LCM OF TWO NUMBERS .WRITE THE ALGORITHM AND FLOWCHART OF THE PROGRAM.

Source code-

```
#include<stdio.h>

int main()
{
int a,b,gcd,lcm;
printf("enter the greatest no");
scanf("%d",&a);
printf("enter the smallest no");
scanf("%d",&b);
int prod=a*b;
while (a%b!=0)
{
gcd=a%b;
a=b;
b=gcd;
}
lcm=prod/gcd;
printf("%d",gcd);
printf("%d",lcm);
return 0;
}
```

output-
enter the greatest no. 25
enter the samllest no. 10
gcd 5
lcm 50

Algorithm-
step 1:start
step 2:input two numbers a and b
step 3:while a%b is not equal to 0
- Gcd=a%b
- A=b
- B=gcd
Step 4:print a as the GCD
Step 5:calculate LCM using the formula LCM=(a*b)/gcd
Step 6:print LCM as the LCM
Step 7:stop

Flowchart-

start

Input a and b

a%b!=0

yes

no

Print a as gcd

Calculate GCD=a%b

a=b

b=GCD

Calculate
LCM=(a*b)/GCD

Print LCM

end