**Exp3:-**

**Title of the program:-**

Write a program to compute the GCD & LCM of two numbers. Write the Algorithm of the program.

**Algorithm:-**

**Step 1:-** Take input a, b, gcd, product, lcm

**Step 2:-** Take user input in a, b

**Step 3:-** set product = a \* b

**Step 4:-** set gcd = a % b go to step – 5

**Step 5:-** set a =b go to step – 6

**Step 6:-** set b = gcd go to step – 7

**Step 7:-** if (a % b !=0) go to step – 4

else go to step – 8

**Step 8:-** set lcm = product / gcd

**Step 9:-** print gcd

print lcm

**Program instruction:-**

#include<stdio.h>

int main()

{

int a,b,gcd,product,lcm;

printf(“Enter the greatest number : ”);

scanf(“%d”,& a);

printf(“Enter the least number : ”);

scanf(“%d”,& b);

product = a\*b;

while(a%b !=0)

{

gcd = a%b;

a=b;

b=gcd;

}

lcm =product/ gcd;

printf(“GCD :%d”, gcd);

printf(“\nLCM :%d”, lcm);

return 0;

}

**Output:-**

Enter the greatest number : 45

Enter the least number : 35

GCD : 5

LCM : 315