

1. Write a program to compute the GCD and LCM of two numbers.write the algorithm of the program.

```
#include <stdio.h>
int main()
{
    int num1,num2,a,b,gcd,lcm;
    printf("Enter the first number");
    scanf("%d",&num1);
    printf("Enter the second number");
    scanf("%d",&num2);
    a=num1;
    b=num2;
    while(b!=0)
    {
        int remainder=a%b;
        a=b;
        b=remainder;
    }
    gcd=a;
    lcm=(num1*num2)/gcd;
    printf("gcd of %d and %d is: %d\n",num1,num2,gcd);
    printf("lcm of %d and %d is: %d\n",num1,num2,lcm);
    return 0 ;
}
```

Output:-

```
Enter the first number 12
Enter the second number 18
gcd of 12 and 18 is: 6
lcm of 12 and 18 is: 36
```

Algorithm:-

1. Take two integers as input.
2. Use the while loop to repeatedly compute the remainder until it becomes 0.
3. Then the formula $(num1 * num2) / gcd$.
4. Print the gcd and lcm.

2. Write a program to check a 4 digit no.to be divisible by 9 or not without using modules operator. Write the flowchart of the program.

```
#include <stdio.h>
int main()
{
    int a,b,sum=0;
```

```

printf("Enter the four digit number");
scanf("%d",&a);
sum=a-((a/10))*10;
if(sum==0)
{
printf("The number is divisible 9");
}
else
{
printf("The number is not divisible 9");
}
return 0 ;
}

```

Output:-

Enter the four digit number 4320

The number is divisible 9

Flowchart:-

