Practical 05

Aim: Write a program to find GCD of two numbers using Euclidean Algorithm.

Code:

```c
#include<stdio.h>

// DM Practical 04:
// WAP to find the GCD(Greater common divisor) of a number
int main()
{
    int x, y;
    printf("Enter two numbers: \n");
    printf("Enter 1st number: \n");
    scanf("%d",&x);
    printf("Enter 2nd number: \n");
    scanf("%d",&y);

    printf("The GCD of (x,y) is: ",x,y);
    while(x!=0)
    {
        x=x%y;
        if(y!=0)
        {
            y=x;
            printf("%d\n",y);
        }
    }
    return 0;
}
```

Output:

```
Enter two numbers:
Enter 1st number:
50
Enter 2nd number:
20
The GCD of (x,y) is: 10
```

```
Enter two numbers:
Enter 1st number:
108
Enter 2nd number:
72
The GCD of (x,y) is: 36
```