program - 2

#include <stdio.h>

#include<time.h>

int gcd(int n1, int n2);

int main() {

clock\_t start,end;

double time;

int n1, n2,result;

printf("Enter two positive integers: ");

scanf("%d %d", &n1, &n2);

start=clock();

result=gcd(n1,n2);

end=clock();

time=(double)(end-start)/CLOCKS\_PER\_SEC;

printf("G.C.D of %d and %d is %d\n", n1, n2, result);

printf("The time taken=%f\n",time);

t return 0;

}

int gcd(int n1, int n2) {

if (n2 != 0)

return gcd(n2, n1 % n2);

else

return n1;

}

OUtput:

[shilpa@shilpa-linux ~]$ cd Desktop

[shilpa@shilpa-linux Desktop]$ cd ADA\_LAB-PROG-main

[shilpa@shilpa-linux ADA\_LAB-PROG-main]$ gcc -o gcd gcd.c

[shilpa@shilpa-linux ADA\_LAB-PROG-main]$ ./gcd.c

bash: ./gcd.c: Permission denied

[shilpa@shilpa-linux ADA\_LAB-PROG-main]$ ./gcd

Enter two positive integers: 1200 400

G.C.D of 1200 and 400 is 400

The time taken=0.000006

[shilpa@shilpa-linux ADA\_LAB-PROG-main]$ ./gcd

Enter two positive integers: 36500 25000

G.C.D of 36500 and 25000 is 500

The time taken=0.000015

[shilpa@shilpa-linux ADA\_LAB-PROG-main]$