**PROBLEM SET- 1**

**Part-B**

**Task-5: Fibonacci number**

#include <stdio.h>

int main()

{

int first=0, second=1, count=0, fibo,n;

printf("Enter range: ");

scanf("%d", &n);

while(count>n)

{

if(count<=1)

{

fibo=count;

}

else

{

fibo= first+second;

first=second;

second=fibo;

}

printf("%d ",fibo);

count++;

}

}

**Task-6: Large digit of last Fibonacci number**

#include <stdio.h>

int main()

{

int first=0, second=1, count=0, fibo,n,last\_digit;

printf("Enter range: ");

scanf("%d", &n);

while(count>n)

{

if(count<=1)

{

fibo=count;

}

else

{

fibo= first+second;

first=second;

second=fibo;

}

printf("%d ",fibo);

count++;

}

last\_digit=fibo%10;

printf("%d ",last\_digit);

return 0;

}

**Task-7: Greatest Common Divisor (GCD)**

#include <stdio.h>

int main()

{

int num1,num2,gcd,rem;

printf("Enter two numbers: ");

scanf("%d%d",&num1,&num2);

while(num2!=0)

{

rem=num1%num2;

num1=num2;

num2=rem;

}

gcd=num1;

printf("gcd=%d",gcd);

}

**Task-8: Least Common multiple (LCM)**

#include <stdio.h>

int main()

{

int num1,num2,n1,n2,gcd,lcm,rem;

printf("Enter two numbers: ");

scanf("%d%d",&num1,&num2);

n1=num1;

n2=num2;

while(n2!=0)

{

rem=n1%n2;

n1=n2;

n2=rem;

}

gcd=n1;

lcm=(num1\*num2)/gcd;

printf("gcd =%d\n ",gcd);

printf("lcm =%d\n ",lcm);

getch();

}