1)

#include<stdio.h>

int lcm(int,int);

int main()

{

int num1,num2,l;

printf("Enter the two numbers:");

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

l=lcm(num1,num2);

printf("LCM of %d and %d = %d",num1,num2,l);

return 0;

}

int lcm(int x,int y)

{

int LCM;

LCM=(x>y)?x:y;

while(1)

{

if(LCM%x==0&&LCM%y==0)

break;

else

LCM++;

}

return LCM;

}

2)

#include<stdio.h>

int hcf(int,int);

int main()

{

int num1,num2,h;

printf("Enter the two numbers:");

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

h=hcf(num1,num2);

printf("HCF of %d and %d = %d",num1,num2,h);

return 0;

}

int hcf(int x,int y)

{

int HCF;

HCF=(x<y)?x:y;

while(1)

{

if(x%HCF==0&&y%HCF==0)

break;

else

HCF--;

}

return HCF;

}

3)

#include<stdio.h>

int prime(int);

int main()

{

int num,p;

printf("Enter the number:");

scanf("%d",&num);

p=prime(num);

if (p==0)

printf("Prime number");

else

printf("Not prime number");

return 0;

}

int prime(int a)

{

int i,c=0;

for(i=2;i<=a/2;i++)

{

if(a%2==0)

c++;

}

return c;

}

4)

#include<stdio.h>

int prime(int);

int main()

{

int num,p;

printf("Enter the number:");

scanf("%d",&num);

p=prime(num);

printf("The next prime number is %d",p);

return 0;

}

int prime(int a)

{

int n,c,i,j;

n=a+1;

for(i=n;i>0;i++)

{

c=0;

for(j=2;j<=i/2;j++)

{

if(i%j==0)

c++;

}

if(c==0)

break;

}

return (i);

}

5)

#include<stdio.h>

void prime(int);

int main()

{

int n;

printf("Enter the number of terms:");

scanf("%d",&n);

prime(n);

return 0;

}

void prime(int a)

{

int i=2,j,c,count=1;

while(count<=a)

{

c=0;

for(j=2;j<=i/2;j++)

{

if(i%j==0)

{

c++;

break;

}

}

if(c==0)

{

printf("%d ",i);

count++;

}

i++;

}

}

6)

#include<stdio.h>

void betprime(int,int);

int main()

{

int a,b,i,j,num1,num2;

printf("Enter the first number:");

scanf("%d",&num1);

printf("Enter the second number:");

scanf("%d",&num2);

betprime(num1,num2);

return 0;

}

void betprime(int a,int b)

{

int i=a+1,j;

while(i<b)

{

int c=0;

for(j=2;j<=i/2;j++)

{

if(i%j==0)

c++;

}

if(c==0)

printf("%d ",i);

i=i+1;

}

}

7) #include<stdio.h>

void fibonacci(int);

int main()

{

int num;

printf("Enter the number of terms:");

scanf("%d",&num);

fibonacci(num);

return 0;

}

void fibonacci(int n)

{

int a,b,c;

a=0,b=1;

for(int i=1;i<=n;i++)

{

printf("%d ",a);

c=a+b;

a=b;

b=c;

}

}

8)

#include<stdio.h>

int factorial(int);

void pascal(int);

int main()

{

int n;

printf("Enter the number of rows:");

scanf("%d",&n);

pascal(n);

return 0;

}

int factorial(int x)

{

int fact=1;

for(int i=1;i<=x;i++)

{

fact\*=i;

}

return fact;

}

void pascal(int n)

{

for(int i=0;i<n;i++)

{

for(int j=0;j<n-i;j++)

{

printf(" ");

}

for(int k=0;k<=i;k++)

{

printf("%d ",factorial(i)/(factorial(k)\*factorial(i-k)));

}

printf("\n");

}

}

9)

#include<stdio.h>

int square(int);

int main()

{

int n,result;

printf("Enter the number:");

scanf("%d",&n);

result=square(n);

printf("The square of %d = %d",n,result);

return 0;

}

int square(int a)

{

int sq;

sq=a\*a;

return sq;

}

10)

#include<stdio.h>

int factorial(int);

int main()

{

int sum=0;

for(int i=1;i<=5;i++)

{

sum=sum+factorial(i)/i;

}

printf("%d",sum);

}

int factorial(int x)

{

int fact=1;

for(int i=1;i<=x;i++)

{

fact\*=i;

}

return fact;

}