1.Write a function to calculate LCM of two numbers. (TSRS).

#include<stdio.h>

int lcm(int x,int y)

{

   int i,max;

   max=x>y?x:y;

   for(i=max;;i++)

      if(i%x==0 && i%y==0) {

        return i;

        break;}

}

int main()

{

   int x,y;

   printf("Enter number: ");

   scanf("%d%d",&x,&y);

   printf("L.C.M is %d",lcm(x,y));

}

2. Write a function to calculate HCF of two numbers. (TSRS).

#include<stdio.h>

int hcf(int x,int y)

{

   int i,min;

   min=x<y?x:y;

   for(i=min;i>=1;i--)

      if(x%i==0 && y%i==0) {

        return i;

        break;}

}

int main()

{

   int x,y;

   printf("Enter two number: ");

   scanf("%d%d",&x,&y);

   printf("H.C.F is %d",hcf(x,y));

}

3. Write a function to check whether a given number is Prime or not. (TSRS).

#include<stdio.h>

int prime(int x)

{

   int i;

   for(i=2;i<x;i++)

   {

     if(x%i==0) {

        return 0;

        break; }

   }

}

int main()

{

   int x,r;

   printf("Enter number: ");

   scanf("%d",&x);

   r=prime(x);

   if(r==0)

    printf("Not prime");

   else

    printf("prime");

}

4.Write a function to find the next prime number of a given number. (TSRS).

#include<stdio.h>

int next\_prime(int x)

{

   int i,j=0;

   while(1)

   {

    for(i=2;i<x;i++)

    {

      if(x%i==0) {

        x++;

        continue;

         }

      else

        j=1;

    }

    if(j==1){

      return x;

      break;}

   }

}

int main()

{

   int x,r;

   printf("Enter number: ");

   scanf("%d",&x);

    printf("Next prime is %d",next\_prime(x));

}

5. Write a function to print first N prime numbers (TSRN).

6. Write a function to print all Prime numbers between two given numbers. (TSRN).

#include<stdio.h>

int prime(int x, int y)

{

   int i,j,min;

   min=x<y?x:y;

   for(i=min;i<=y;i++)

   {

      for(j=2;j<=i;j++)

      {

         if(i%j==0)

           break;

      }

      if(i==j)

        printf("%d ",i);

   }

}

int main()

{

   int x,y;

   printf("Enter number: ");

   scanf("%d%d",&x,&y);

   prime(x,y);

}

7. Write a function to print first N terms of Fibonacci series (TSRN).

#include<stdio.h>

void fib(int n)

{

   int i=0,j=1,k,count=1;

   while(count<=n)

   {

      printf("%d ",j);

      count++;

      k=j;

      j=i+j;

      i=k;

   }

}

int main()

{

   int x,y;

   printf("Enter number: ");

   scanf("%d",&x);

   fib(x);

}

8. Write a function to print PASCAL Triangle. (TSRN).

9. Write a program in C to find the square of any number using the function.

#include<stdio.h>

int square(int n)

{

   return (n\*n);

}

int main()

{

   int x,y;

   printf("Enter number: ");

   scanf("%d",&x);

   printf("square of %d is %d ",x,square(x));

}

10. Write a program in C to find the sum of the series 1! /1+2!/2+3!/3+4!/4+5!/5 using the

function.

#include<stdio.h>

int fact(int num)

{

   int f=1,i;

   for(i=1;i<=num;i++)

     f=f\*i;

   return f;

}

int sum(int n)

{

   float sum=0;

   int j;

   for(j=1;j<=5;j++)

       sum=sum + fact(j)/j;

   return sum;

}

int main()

{

   printf("Sum is %d", sum(5));

}