LAB 02

1. Write a program to find Factorial.

Code:

**public** **class** Factorial {

**public** **int** fact=1;

**public** **int** factor(**int** x) {

**if**(x>0) {

fact = fact \* x;

x=x-1;

factor(x);

}

**return** fact;

}

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter number to find it's factorial :");

**int** f = sc.nextInt();

Factorial fc = **new** Factorial();

**int** res = fc.factor(f);

System.***out***.println(res);

sc.close();

}

}

1. Write a program to find Fibonacci Series.

Code:

**import** java.util.Scanner;

/\*\*

\* **@author** HAM12MAD

\*

\*/

**public** **class** Fibonacci {

**public** **int** en,res=0,a=1,b=1,c;

Fibonacci(**int** x){

**this**.en = x;

}

**public** **void** series() {

**for**(**int** i=0; i<**this**.en; i++) {

System.***out***.print(a+"\t");

c = a+b;

a = b;

b = c;

}

}

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter range of the fibonacci series :");

**int** fb = sc.nextInt();

Fibonacci f = **new** Fibonacci(fb);

f.series();

sc.close();

}

}

1. Write a program to reverse a number.

Code:

**import** java.util.Scanner;

/\*\*

\* **@author** HAMMAD

\*

\*/

**public** **class** ReverseNumber {

**public** **int** rev=0, num, n1;

ReverseNumber(**int** x){

num = x;

}

**public** **int** reverse() {

**while**(**this**.num!=0)

{

n1 = num % 10;

rev = rev \* 10 + n1;

num = num / 10;

}

**return** rev;

}

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter a number to perform reverse operation :");

**int** x = sc.nextInt();

ReverseNumber rs = **new** ReverseNumber(x);

**int** res = rs.reverse();

System.***out***.println(res);

sc.close();

}

}

1. Write a program to find whether the number is a prime number.

Code:

**import** java.util.Scanner;

/\*\*

\* **@author** HAMMAD

\*

\*/

**public** **class** PrimeNumber {

**static** **boolean** isPrime(**int** p) {

**for**(**int** i = 2; i<=Math.*sqrt*(p); i++) {

**if**((p%i) == 0) {

**return** **true**;

}

}

**return** **false**;

}

**public** **static** **void** main(String[] args) {

Scanner sc = **new** Scanner(System.***in***);

System.***out***.println("Enter a number :");

**int** x = sc.nextInt();

**if**(x == 2 || PrimeNumber.*isPrime*(x)) {

System.***out***.println(x+" is a not prime number.");

}

**else**{

System.***out***.println(x+" is a prime number.");

}

sc.close();

}

}