A SHORT-TERM INTERNSHIP REPORT

On

JAVA FULL-STACK PROGRAMMING

Submitted To The Department Bachelor of ComputerApplications

By

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III BCA

Under the Esteemed Guidance of

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KAKINADA ADITYA WOMENS DEGREE COLLEGE, SRIKAKULAM

(Affiliated to Dr.Br.AmbedkarUniversity)

SRIKAKULAM-532001, Srikakulam. Dt,
ANDHRA PRADESH

2021-2024

CERTIFICATE

Of Internship

Proudly Presented to :

SAMPADA RAO LAXMI

Of KAKINDA ADITYA DEGREE COLLEGE
Has Successfully Completed Core Java Internship
During 18th August 2023 to 30th September 2023
In Adhoc Network Tech Company

PROJECT MANAGER

KAKINADA ADITYA WOMENS DEGREE COLLEGE

Department of Bachelor Of ComputerApplications

CERTIFICATE

This is to certify that The Short Term Internship entitled, **"JAVA FULL STACK PROGRAMMING"** is a bonafide work of **SAMPADA RAO LAXMI,** bearing **2122014069077, III BCA**, submitted to the Department of Bachelor Of Computer Applications, Kakinada Aditya women's Degree College, Srikakulam for the Academic year 2021-2024.

Internship Guide | **Head of the Department**

Sri.E.Ramkumar,M.C.A | **Mr.L. Prasad Rao,M.SC,M.tech**

External Examiner | **Principal**

KAKINADA ADITYA WOMENS DEGREE COLLEGE

Department of Bachelor Of ComputerApplications

DECLARATION BY THE STUDENT

I hereby declare that the work described in this Short Term Internship, entitled "**JAVA FULL STACK PROGRAMMING**" which is being submitted by me in partial fulfilment of the requirements for the award of degree of **Bachelor of Computer Applications** from the Department of Bachelor of Computer Applications to Kakinada Aditya women's Degree College, Srikakulam under the guidance of Mr.E.RamKumar(M.C.A) lecturer in Aditya Degree College, Srikakulam.

Place:Srikakulam **(S.LAXMI)**

Date:

KAKINADA ADITYA WOMENS DEGREE COLLEGE

Department of Bachelor Of ComputerApplications

CERTIFICATE FROM THE SUPERVISOR

This is to certify that the Short Term Internship entitled, **"JAVA FULL STACK PROGRAMMING",** that is being submitted by **SAMPADA RAO LAXMI** bearing **2122014069077, III BCA**, which is being submitted by me in partial fulfilment of the requirements for the award of degree of **Bachelor of Computer Applications** from the Department of Bachelor of Computer Applications to Kakinada Aditya Womens Degree College, bonified work carried out by him under my guidance and Supervision.

(Mr.E.RamKumar,M.C.A)

ACKNOWLEDGEMENT

No endeavour is completed without the valuable support of others. I would like to take this opportunity to extend my sincere gratitude to all those who have contributed to the successful completion of this Short-Term Internship Project Report.

At this juncture I feel deeply honoured in expressing my sincere thanks to **Miss**.**DEVIKA PAKRUTHI**, Founder & CEO of Adhoc Network Tech Company, Visakhapatnam for making the resources available at right time and providing valuable insights leading to the successful completion of my Short-Term Internship Project Report.

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I thank **Mr.L.PRASAD RAO**, Head of the Department of Bachelor of Computer Science, Kakinada Aditya Degree Womens College- Srikakulam, for supporting and encouraging me in completion of my Short-Term Internship.

Finally, I thank all the faculty members of our Department who contributed their valuable suggestions in completion of Short-Term Internship report and Ialso put my sincere thanks to My Parents who stood with me during the wholeShort-Term Internship.

S.LAXMI

PROGRAMS

1.Write a demo program to display HelloWorld

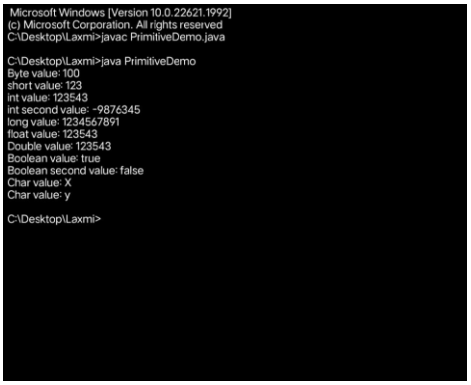
```
class Demo1
{
 public static void main(String args[])
{
   System.out.println(“Hello World!”);
}
}
```

OUTPUT :

2. Write a demo program on DataTypes

```
 public class PrimitiveDemo
{
public static void main(String args[])
{
byte b=100;
short s=123;
int v=123543;
int calc=-9876345;
long amountVal=1234567891;
float interestRate=12.25f;
double sineVal=12345.234d;
boolean flag=true;
boolean val=false;
char ch1=88;
char ch2='y';
System.out.println("Byte value:"+b);
System.out.println("Short value:"+s);
System.out.println("Int value:"+v);
System.out.println("Int second value:"+calc);
System.out.println("long value:"+amountVal);
System.out.println("Float value:"+v);
System.out.println("Double value:"+v);
System.out.println("Boolean value:"+flag);
System.out.println("Byte value:"+val);
System.out.println("Char value:"+ch1);
System.out.println("Char value:"+ch2);
}
}
```

OUTPUT :



3.Write a demo program on type conversion

```
class Demo
{
public static void main(String args[])
{
char ch1='A';
double d1=ch1;
System.out.println(d1);
System.out.println(ch1*ch1);
double d2=66.0;
char ch2=(char)d2;
System.out.println(ch2);
}
}
```

OUTPUT :

4.Write a Demo program on one-Dimensional array

```
class Average
{
public static void main(String args[])
{
double num[]={10.1,11.2,12.3,13.4,14.5};
double result=0;
for(int i=0;i<5;i++)
result=result+num[i];
System.out.println("Average of numbers:"+result/5);
}
}
```

OUTPUT :

5.Write a demo program on Two – Dimensional array

```
class TwoDim
{
public static void main(String args[])
{
int a[][]=new int[2][2];
int b[][]=new int[2][2];
a[0][0]=1;
a[0][1]=2;
a[1][0]=3;
a[1][1]=4;
b[0][0]=5;
b[0][1]=6;
b[1][1]=8;
int c[][]=new int[2][2];
System.out.println("elements of first matrix:");
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
System.out.println(a[i][j]);
}
}
System.out.println("elements of second matrix:");
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
System.out.println(b[i][j]);
}
}
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
c[i][j]=a[i][j]+b[i][j];
}
}
System.out.println("Addition of two matrices");
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
System.out.println(c[i][j]);
}
}
}
}
```

OUTPUT :


Microsoft Windows [Version 10.0.22621.1992]
(c) Microsoft Corporation. All rights reserved
C:\Desktop\Laxmi>javac TwoDim.java
C:\Desktop\Laxmi>java TwoDim
Elements of first Matrix:
1
2
3
4
Elements of second Matrix:
5
6
0
8
Addition of two Matrices:
6
8
3
12
C:\Desktop\Laxmi>

6.Write a demo program on Arithmetic operator

```
import java.util.Scanner;

class BasicArithmeticDemo

{
public static void main(String args[])
{
int a,b;
System.out.println("Value of a and b:");
Scanner input=new Scanner(System.in);
a=input.nextInt();
b=input.nextInt();
System.out.println("Addition:"+(a+b));
System.out.println("Subtraction:"+(a-b));
System.out.println("Multiplication:"+(a*b));
System.out.println("Division:"+(a/b));
System.out.println("Percentage:"+(b%a));
}
}
```

OUTPUT :

7.Write a demo program on relational operator

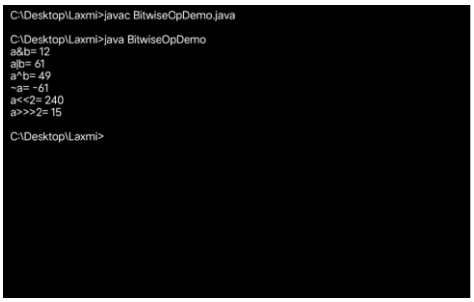
```
import java.util.Scanner;

class RelOpDemo

{
public static void main(String Args[])
{
int a,b;
System.out.println("Value of a and b:");
Scanner input=new Scanner(System.in);
a=input.nextInt();
b=input.nextInt();
System.out.println("Greater than operator(a>b):"+(a>b));
System.out.println("Greater than or equal to operator(a>=b):"+(a>=b));
System.out.println("Less than operator(a<b):"+(a<b));
System.out.println("Lesser than or equal to operator(a<=b):"+(a<=b));
System.out.println("Not equal to operator(a!=b):"+(a!=b));
System.out.println("Equal to operator(a==b):"+(a==b));
}
}
```

OUTPUT :

8.Write a demo program on bitwise operators

```
public class BitwiseOpDemo
{
public static void main(String args[])
{
int a=60;
int b=13;
int c=0;
c=a&b;
System.out.println("a&b="+c);
c=a|b;
System.out.println("a|b="+c);
c=a^b;
System.out.println("a^b="+c);
c=-a;
System.out.println("-a="+c);
c=a<<2;
System.out.println("a<<2="+c);
c=a>>2;
System.out.println("a>>2="+c);
c=a>>>2;
System.out.println("a>>>2="+c);
}
}
```

OUTPUT :

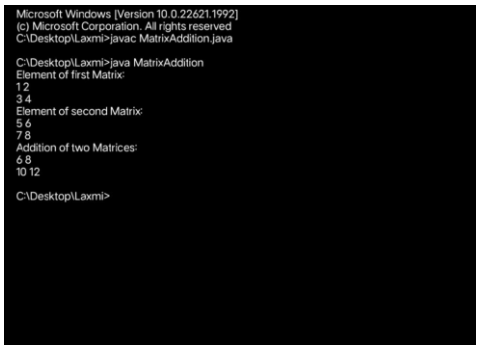


9.Write a demo program to print elements in matrix form

```
class MatrixAddition
{
public static void main(String args[])
{
int a[][]=new int[2][2];
int b[][]=new int[2][2];
a[0][0]=1;
a[0][1]=2;
a[1][0]=3;
a[1][1]=4;
b[0][0]=5;
b[0][1]=6;
b[1][0]=7;
b[1][1]=8;
int c[][]=new int[2][2];
System.out.println("Elements of first matrix:");
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
System.out.print(a[i][j]+" ");
}
System.out.println();
}
System.out.println("elements of second matrix:");
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
System.out.print(b[i][j]+" ");
}
System.out.println();
}
for(int i=0;i<2;i++)
{
for(int j=0;j<2;j++)
{
c[i][j]=a[i][j]+b[i][j];
}
}
System.out.println("Addition of two matrices:");
for(int i=0;i<2;i++)
```

```
{
for(int j=0;j<2;j++)
{
System.out.print(c[i][j]+" ");
}
System.out.println();
}
}
}
```

OUTPUT :



10.Write a program to print stars in increasing Triangular format

```
class TriangleStarPattern
{
public static void main(String args[])
{
int n=5;
for(int i=1;i<=n;i++)
{
for(int j=1;j<=i;j++)
{
System.out.print("  *  ");
}
System.out.println();
}
}
}
```

OUTPUT :

11.Write a demo program on conditional operator

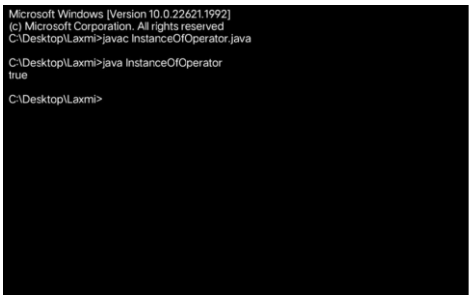
```
public class ConditionalOp
{
public static void main(String args[])
{
int a,b;
a=10;
b=(a==1)?20:30;
System.out.println("Value of b is:"+b);
b=(a==10)?20:30;
System.out.println("Value of b is:"+b);
}
}
```

OUTPUT :

12.Write a program on instance of operator

```
public class InstanceOfOperator
{
public static void main(String args[])
{
String name="James";
boolean result=name instanceof String;
System.out.println(result);
}
}
```

OUTPUT :



13.Write a demo program on Vehicle using Instance of Operator

```
class Vehicle
{
}
public class Car extends Vehicle
{
public static void main(String args[])
{
Vehicle ve=new Car();
boolean result=ve instanceof Car;
System.out.println(result);
}
}
```

OUTPUT :

14. Write a demo program on if statement

```
class If
{
public static void main(String args[])
{
int test=10;
if(test>6)
{
System.out.println("Success!");
}
System.out.println("Executed successfully");
}
}
```

OUTPUT :

15. Write a demo program on IF-Else statement

```
class Ifelse
{
public static void main(String args[])
{
int test=10;
if(test==10)
{
System.out.println("The value is equal to 10");
}
else
{
System.out.println("Value not equal to 10");
}
}
}
```

OUTPUT :

16. Write a demo program on Nested ifelse

```
public class NestedIfElse
{
public static void main(String args[])
{
int test1=3;
int test2=3;
if(test1==5)
{
if(test2==3)
{
System.out.println("hi, test1 is 5 and test2 Is 3");
}
else
{
System.out.println("test 1 is 5 and test 2 is somevalue is other than 3");
}
}
else if(test1==4)
{
System.out.println("hi,test1 is 3 and test2 is 3");
}
else if(test1==3)
{
if(test2==3)
{
System.out.println("hi,test1 is 3 and test 2 is 3");
}
else if(test2==2)
{
System.out.println("hi,test1 is 3 and test2 is 2");
}
}
else
System.out.println("hi,test 1 is somevalue other than5,4,3");
}
}
```

OUTPUT:


Microsoft Windows [Version 10.0.22621.1992]
(c) Microsoft Corporation. All rights reserved
C:\Desktop\Laxmi>javac NestedifElse.java
C:\Desktop\Laxmi>java NestedifElse
hi, test1 is 3 and test 2 is 3
C:\Desktop\Laxmi>

17. Write a demo program on While loop

```
class WhileLoopEx3
{
public static void main(String args[])
{
int arr[]={2,11,45,9};
int i=0; while(i<4)
{
System.out.print(arr[i]+" ");
i++;
}
}
}
```

OUTPUT :

18. Write a demo program on If-else ladder

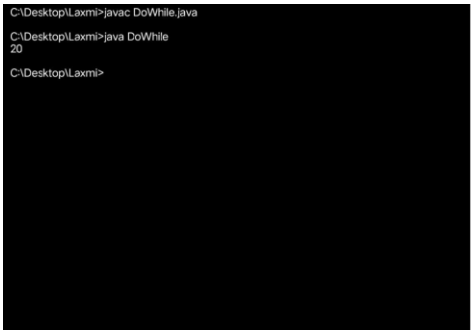
```
public class Ifelseladder
{
public static void main(String args[])
{
int test=2;
if(test==1)
System.out.println("Hello");
else if (test==2)
System.out.println("Hi");
else if (test==3)
System.out.println("Good");
else
System.out.println("No match found");
}
}
```

OUTPUT :

19. Write a demo program on DoWhile

```
class DoWhile
{
public static void main(String args[])
{
int i=20;
do
{
System.out.println(i);
i--;
}
while(i<1);
}
}
```

OUTPUT :



20. Write a program on switch demo

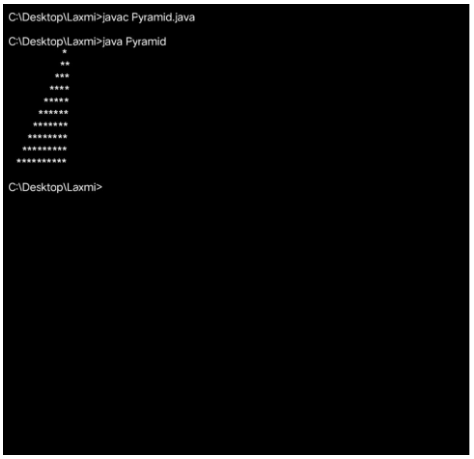
```
class SwitchDemo2
{
public static void main(String args[])
{
int month=2;
int year=2000;
int numDays=0;
switch(month)
{
case 1:
case 3:
case 5:
case 7:
case 8:
case 10:
case 12:
      numDays =31;
      break;
case 2:

   if(((year%4==0) && !(year% 100==0)) || (year%400==0))
   numDays=29;
   else
   numDays=28;
   break;
default:
   System.out.println("Invalid month");
   break;
}
System.out.println("Number of days="+numDays);
}
}
```

OUTPUT :

21. Write a program to print the pyramid

```
 import java.util.*;
public class Main
{
public static void main(String args[])
{
Scanner sc=new
Scanner(System.in);
System.out.print("Enter no of rows:");
int n=sc.nextInt();
for(int i=0;i<n;i++)
{
for(int s=1;s<=(n-i);s++)
{
System.out.print(" ");
}
for(int j=0;j<=i;j++)
{
System.out.print("*");
}
System.out.println();
}
}
}
```

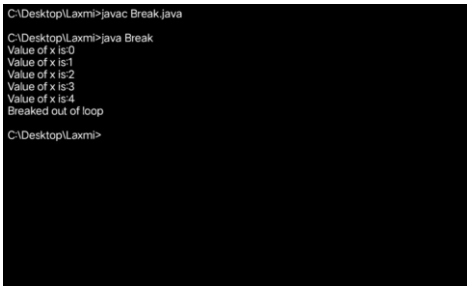
OUTPUT :



22. Write a program on Break statement

```
class BreakLoop
{
public static void main(String args[])
{
for(int x=0;x<50;x++)
{
if(x==5)
{
break;
}
System.out.println("Value of x is:"+x);
}
System.out.println("Breaked out of loop");
}
}
```

OUTPUT :



23. Write a program on Continue statement

```
class NumberExcept
{
   public static void main(String args[])
   {
      int i;
      for(i=0;i<=10;i++)
      {
         if(i==5)
         continue;
         System.out.println(i+"");
      }
   }
}
```

OUTPUT :

24.Write a program to find minimum value

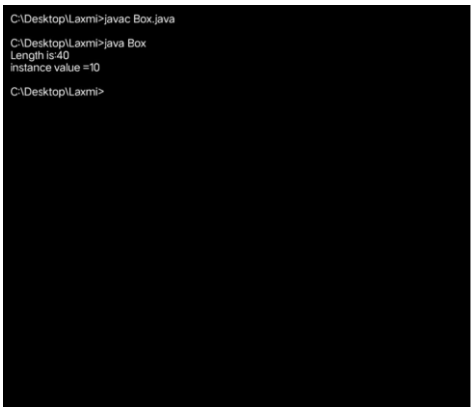
```
public class ExampleMinNum
{
   public static void main(String args[])
   {
      int a=11;
      int b=6;
      int c=minFunction(a,b);
      System.out.println("Minimum value:"+c);
   }
   public static int minFunction(int n1,int n2)
   {
      int min;
      if(n1>n2)
      min=n2;
      else
      min=n1;
      return min;
   }
}
```

OUTPUT :

25.Write a program on this for instance variable

```
 class Box
{
int len=10;
void meth()
{
int len =40;
System.out.println("Length is:"+len);
System.out.println("instance value="+this.len);
}
}
class ThisInstance
{
public static void main(String args[])
{
Box obj=new Box();
obj.meth();
}
}
```

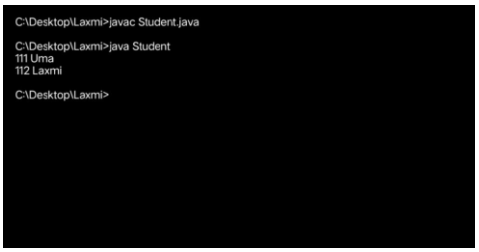
OUTPUT :



26.Write a program on usage of class and new

```
class Student2
{
int rollno;
String name;
void insertRecord(int r,String n)
{
rollno=r;
name=n;
}
void displayInformation()
{
System.out.println(rollno+" "+name);
}
public static void main(String args[])
{
Student2 s1=new Student2();
Student2 s2=new Student2();
s1.insertRecord(111,"Uma");
s2.insertRecord(112, "Laxmi ");
s1.displayInformation();
s2.displayInformation();
}
}
```

OUTPUT :



27.Write a program on Default constructor

```
 public class MyDefaultCons
{
public MyDefaultCons()
{
System.out.println("I am inside default constructor");
}
public static void main(String args[])
{
MyDefaultCons mdc=new MyDefaultCons();
}
}
```

OUTPUT :

28.Write a program on parameter constructor

```
class Student4
{
int id;
String name;
Student4(int i,String n)
{
id=i;
name=n;
}
void display()
{
System.out.println(id+" "+name);
}
public static void main(String args[])
{
Student4 s1=new Student4(2003, "Uma");
Student4 s2=new Student4(2003, "laxmi");
s1.display();
s2.display();
}
}
```

OUTPUT :

29.Write a program on Constructor overloading

```
class Student5
{
int id;
String name;
int age;
Student5(int i,String n,int a)
{
id=i;
name=n;
age=a;
}
void display()
{
System.out.println(id+" "+name+" "+age);
}
public static void main(String args[])
{
Student5 s1=new Student5(2003, "Laxmi",22);
Student5 s2=new Student5(2003, "Uma", 21);
s1.display();
s2.display();
}
}
```

OUTPUT :

30.Write a program on Copy Constructor

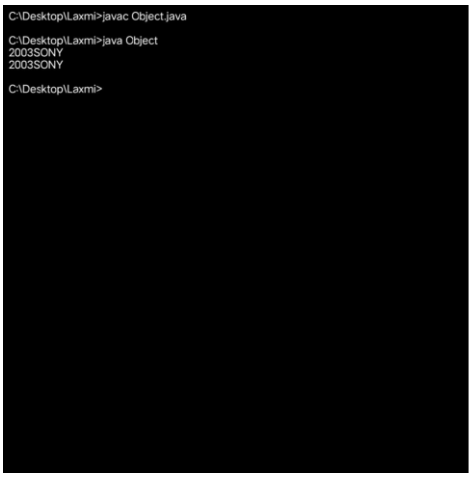
```
 class Student6
{
int id;
String name;
Student6(int i,String n)
{
id=i;
name=n;
}
Student6(Student6 s)
{
id=s.id;
name=s.name;
}
void display()
{
System.out.println(id+" "+name);
}
public static void main(String args[])
{
Student6 s1=new Student6(2003, "Uma");
Student6 s2=new Student6(s1);
s1.display();
s2.display();
}
}
```

OUTPUT :

31.Write a program on copying object without constructor

```
class Student7
{
int id;
String name;
Student7(int i, String n)
{
id=i;
name=n;
}
Student7()
{
}
void display()
{
System.out.println(id+" "+name);
}
public static void main(String args[])
{
Student7 s1=new Student7(2003, "SONY");
Student7 s2=new Student7();
s2.id=s1.id;
s2.name=s1.name;
s1.display();
s2.display();
}
}
```

OUTPUT :



32.Write a program on this pointer

```
 class Student8
{
int id;
String name;
Student8(int id,String name)
{
this.id=id;
this.name=name;
}
void display()
{
System.out.println(id+" "+name);
}
public static void main(String args[])
{
Student8 s1=new Student8(2003, "Uma");
Student8 s2=new Student8(2003, "Laxmi");
s1.display();
s2.display();
}
}
```

OUTPUT :

33.Write a program on without this pointer

```
 class Student10
{
int id;
String name;
Student10(int id,String name)
{
id=id;
name=name;
}
void display()
{
System.out.println(id+" "+name);
}
public static void main(String args[])
{
Student10 s1=new Student10(2003, "Praneeth");
Student10 s2=new Student10(2003, "Prayaga");
s1.display();
s2.display();
}
}
```

OUTPUT :

34.Write a program on this pointer

```
 class JBT
{
int variable=5;
public static void main(String args[])
{
JBT obj=new JBT();
obj.method(20);
obj.method();
}
void method(int variable)
{
variable=10;
System.out.println("value ofinstancevariable: "+this.variable);//refers object of
current so 5
System.out.println("value of local variable:"+variable);
}
void method()
{
int variable=40;
System.out.println("value of instancevariable:"+this.variable);
System.out.println("value of local variable:"+variable);
}
}
```

OUTPUT :

35.Write a program on this pointer in constructor

```
class JBT2
{
JBT2()
{
this("JBT2");//jbt2 value passed so jbt2(string) prints first
System.out.println("inside constructor without parameter");
}
JBT2(String str)
{
System.out.println("inside constructor with string parameter"+str);
}
public static void main(String args[])
{
JBT2 obj=new JBT2();
}
}
```

OUTPUT :

36.Write a program on this keyword with method?// this:to involve current class method?

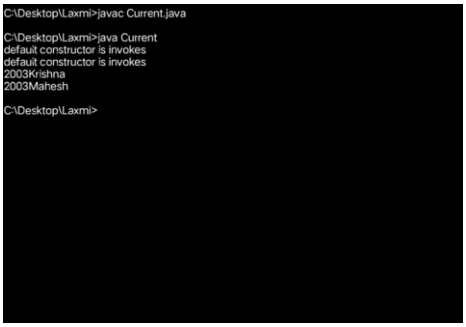
```
 class JBT3
{
public static void main(String args[])
{
JBT3 obj=new JBT3();
obj.methodTwo();
}
void methodOne()
{
System.out.println("inside method one");
}
void methodTwo()
{
System.out.println("inside method two");
this.methodOne();
}
}
```

OUTPUT :

37.Write a program on this () can be used to invoked current class

```
 class Student9
{
int id;
String name;
Student9()
{
System.out.println("default constructor is invoked");
}
Student9(int i,String n)
{
this();//to invoke current class constructor
id=i;
name=n;
}
void display()
{
System.out.println(id+""+name);
}
public static void main(String args[])
{
Student9 e1=new Student9(2002, "Krishna");//object created then goes to studnt class so it is execyted then this is invoked calls default constructor
Student9 e2=new Student9(2003, "Mahesh");
e1.display();
e2.display();
}
}
```

OUTPUT :



38.Write a program on counter without static variable

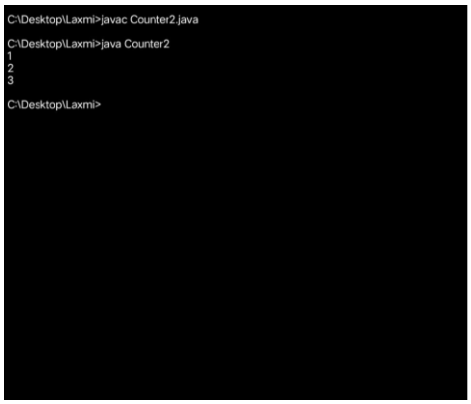
```
class Counter
{
int count=0;
Counter()
{
count++;
System.out.println(count);
}
public static void main(String args[])
{
Counter c1=new Counter();
Counter c2=new Counter();
Counter c3=new Counter();
}
}
```

OUTPUT :

39.Write a program on counter with static variable

```
class Counter2

static int count=0;

Counter2()

count++;

System.out.println(count);

public static void main(String args[])

Counter2 c1-new Counter2(); Counter2 c2= new Counter2(); Counter2 c3=new
Counter2();
```

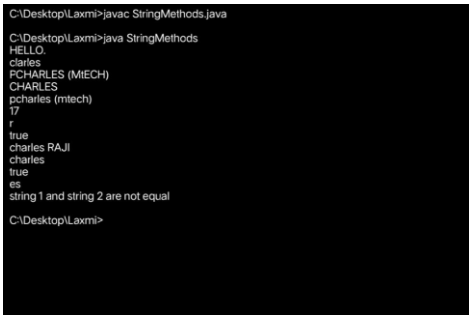
OUTPUT :



40.program to impement string methods

```
class StringMethods {
   public static void main(String[] args) {
     String s1=new String("charles");
     String s2="P "+"CHARLES "+"(MTECH)";
     String s3=s1;

     char[] helloArray={'H','E','L','L','O','.'};
     String s4=new String(helloArray);
     System.out.println(s4);
     System.out.println(s1);
     System.out.println(s2);
     System.out.println(s1.toUpperCase());
     System.out.println(s2.toLowerCase());
     System.out.println(s2.length());
     System.out.println(s1.charAt(3));
     System.out.println(s1.equals(s3));
     System.out.println(s1.concat("RAJI"));
     System.out.println(s1.replace('c','C'));
     System.out.println(s1.equalsIgnoreCase("CHARLES"));
     System.out.println(s1.substring(5));
     if(s1.equals(s2))
     System.out.println("string 1 and string 2 are equal");
     else
     System.out.println("string 1 and string 2 are not equal");

   }
}
```

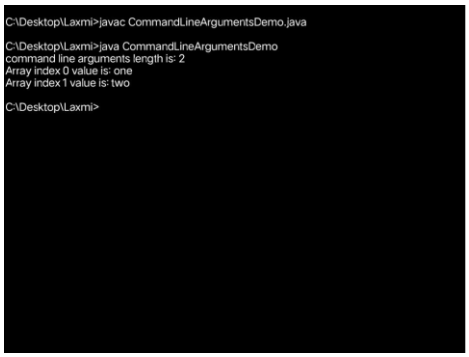
OUTPUT :



41.program on command line arguments

```
class CommandLineArgumentsDemo{
 public static void main(String[] args){
 System.out.println("command line arguments length is:"+args.length);
System.out.println("Array index 0 value is:"+args[0]);
System.out.println("Array index 1 value is:"+args[1]);
}
}
```

OUTPUT :



42.program to implement Hybrid inheritance

```
class A
{
public void methodA()
{
 System.out.println("class A methodA");
}
}
class B extends A
{
public void methodA()
{
System.out.println("child class B is over ridding inherited method");
}
public void methodB()
{
System.out.println("class B method B");
}
}
class C extends A
{
public void methodA()
{
System.out.println("child class C is over ridding inherited method");
}
public void methodC()
{
System.out.println("class c method c");
}
}
```

```
class D extends B
{
public void methodD()
{
System.out.println("class D method D");
}
public static void main(String[] args)
{
D obj1=new D();
obj1.methodD();
obj1.methodA();
}
}
```

OUTPUT :

43.program on method overriding with super

```
class ABC{
   public void mymethod()
   {
      System.out.println("class ABC:mymethod()");
   }
}
class Test extends ABC
{
   public void mymethod()
   {
      super.mymethod();
      System.out.println("class test:mymethod()");
   }
   public static void main(String[] args) {
      Test obj=new Test();
      obj.mymethod();
   }
}
```

OUTPUT :

44.program on package

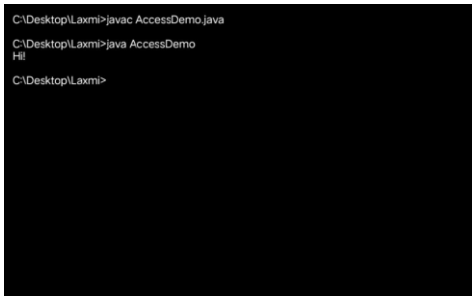
AccessDemo.java

```
package abc;
public class AccessDemo
{
   public void test()
   {
      System.out.println("Hi!");
   }
}
```

AccessExample.java

```
import abc.AccessDemo;
public class AccessExample{
   public static void main(String[] args) {
      AccessDemo ad=new AccessDemo();
      ad.test();
   }
}
```

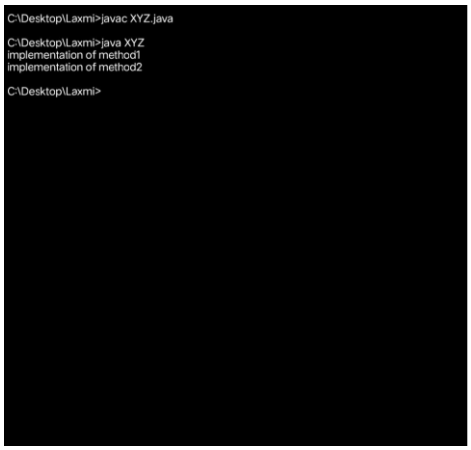
OUTPUT :



45.program on interface

```
interface Myinterface{
   public void method1();
   public void method2();
}
class XYZ implements Myinterface{
   public void method1()
   {
      System.out.println("implementation of method1");
   }
   public void method2()
   {
      System.out.println("implementation of method2");
   }
   public static void main(String[] args) {
      Myinterface obj=new XYZ();
      obj.method1();
      obj.method2();
   }
}
```

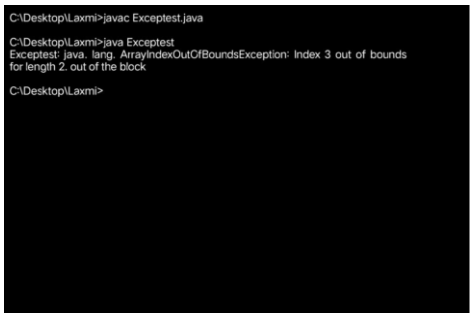
OUTPUT :



46.program to implement try,catch blocks

```
import java.io.*;
public class ExceptionTest{
    public static void main(String[] args) {
      try
      {
         int a[]=new int[2];
         System.out.println("accessing element three:"+a[3]);
      }
      catch(ArrayIndexOutOfBoundsException e)
      {
         System.out.println("Exception:"+e);
      }
      System.out.println("out of the block");
   }
}
```

OUTPUT :



47.program to implement try,catch and finally blocks

```
import java.io.*;
public class ExceptionTest{
public static void main(String[] args)
{
try
{
int i=10/0;
}
catch(ArithmeticException e)
{
System.out.println("inside 1st catch block");
}
finally
{
System.out.println("inside 1st finally block");
}
try
{
int i=10/10;
}
catch(ArithmeticException e)
{
System.out.println("inside 2nd catch block");
}
finally
{
System.out.println("inside 2nd finally block");
}
```

```
    }
}
```

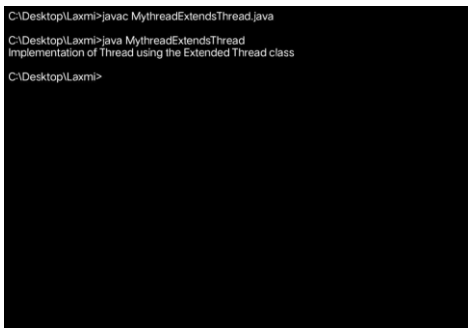
OUTPUT :


C:\Desktop\Laxmi>javac Myfinaliyblock.java
C:\Desktop\Laxmi>java Myfinaliyblock
Inside 1st catch block
Inside 1st finaliy block
Inside 2st finaliy block
C:\Desktop\Laxmi>

48.program to create our own thread using extended Thread class

```
class MyThread extends Thread{
   public void run()
   {
       System.out.println("Implementation of Thread using the Extended Thread class");
   }
}
class MyThreadExtendsThread{
     public static void main(String[] args) {
      MyThread mt=new MyThread();
      mt.start();
   }
}
```

OUTPUT :



49.program to create our own thread using Runnable interface

```
class MyThread implements Runnable{
   public void run()
   {
      System.out.println("Implementation of Thread using the Runnable interface");
   }
}
class MyThreadImplementsRunnable{
     public static void main(String[] args) {
      Runnable r=new MyThread();
      Thread t=new Thread(r);
      t.start();
   }
}
```

OUTPUT :

50.program to implement Thread Methods using Thread Class

```
class MyThread extends Thread{
   public void run()
   {
      for(int i=0;i<=5;i++)
      {
       try
       {
          Thread.sleep(1000);
       }
       catch(Exception e)
       {
       }
       System.out.println(i);
      }
   }
}
class ThreadMethods{
     public static void main(String[] args) {
      MyThread mt=new MyThread();
      System.out.println("Thread name is:"+mt.getName());
      mt.setName("Laxmi");
      System.out.println("Thread name after setting new name is:"+mt.getName());
      System.out.println("Thread Priority is:"+mt.getPriority());
      mt.setPriority(1);
      System.out.println("After Changing Thread Priority is:"+mt.getPriority());
      System.out.println("Thread ID is:"+mt.getId());
      mt.start();
   }
}
```

OUTPUT :

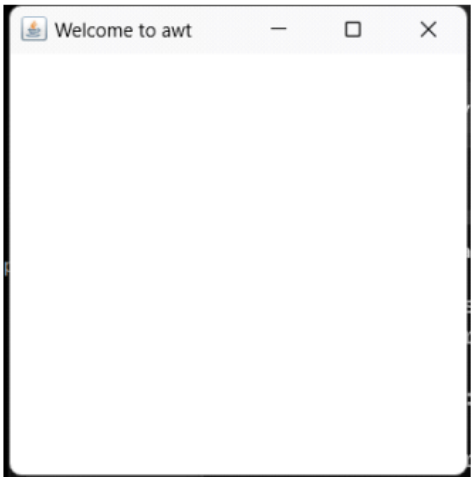

C:\Desktop\Laxmi>java ThreadMethods
Thread name is: Thread-0
Thread name after setting new name is: Laxmi
Thread Priority is: 5
After Changing Thread Priority is: 1
Thread ID id: 10
0
1
2
3
4
5
C:\Desktop\Laxmi>

Advanced java frames

1. program to create frame by frame class

```
import java.awt.*;
class Awt1{
Awt1(String s){
Frame f=new Frame();
f.setTitle(s);
f.setSize(500,500);
f.setVisible(true);
}
public static void main(String[] args)
{
Awt1 a=new Awt1("Welcome to awt");
}
}
```

Output –



2.program to create frame by extending Frame class

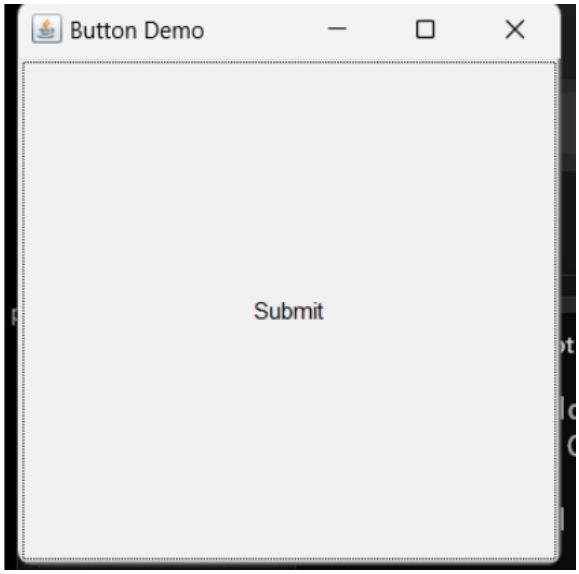
```
import java.awt.*;
class Awt2 extends Frame
{
Awt2(String s)
{
this.setTitle(s);
this.setSize(300,300);
this.setVisible(true);
}
public static void main(String[] args)
{
Awt2 a=new Awt2("welcome to Awt2");
}
}
```

Output –

3.program to create a button

```
import java.awt.*;
class Container extends Frame
{
Container(String s)
{
this.setTitle(s);
this.setSize(300,300);
this.setVisible(true);
Button b=new Button("Submit");
add(b);
}
public static void main(String[] args)
{
Container c=new Container("Button Demo");
}

}
```

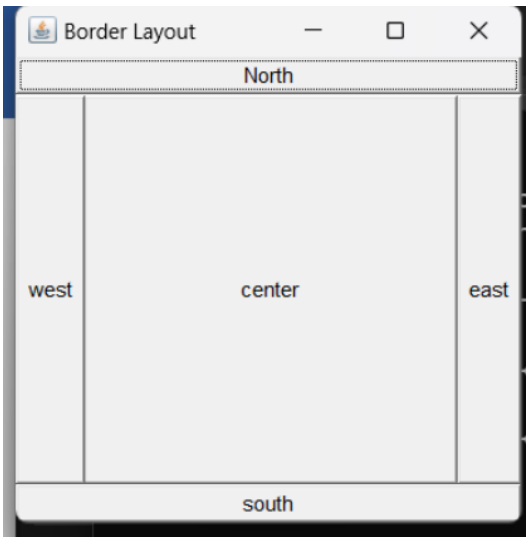
Output –



4.program to create BorderLayout

```
import java.awt.*;
class BorderLay extends Frame
{
 BorderLay(String s)
{
 this.setVisible(true);
 this.setTitle(s);
this.setSize(300,300);
Button b1,b2,b3,b4,b5;
 b1=new Button("North");
b2=new Button("south");
b3=new Button("east");
b4=new Button("west");
b5=new Button("center");
add(b1,BorderLayout.NORTH);
add(b2,BorderLayout.SOUTH);
add(b3,BorderLayout.EAST);
add(b4,BorderLayout.WEST);
add(b5,BorderLayout.CENTER);
}
 public static void main(String[] args)
 {
 BorderLay bl=new BorderLay("Border Layout");
 }
 }
```

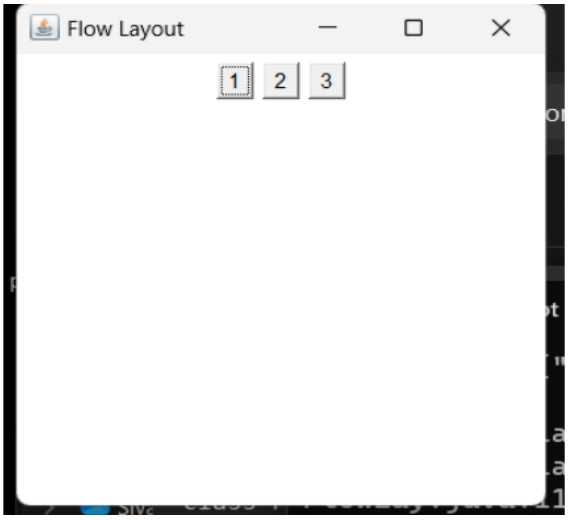
Output –



5.program to create FlowLayout

```
 import java.awt.*;
class FlowLay extends Frame
 {
FlowLay(String s)
 {
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
 Button b1,b2,b3;
b1=new Button("1");
b2=new Button("2");
b3=new Button("3");
FlowLayout f=new FlowLayout();
this.setLayout(f);
add(b1);
add(b2);
 add(b3);
 }
public static void main(String[] args)
{
 FlowLay f=new FlowLay("Flow Layout");
}
}
```

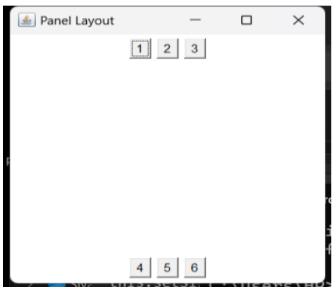
Output –



6.program to create Panel Layout

```
import java.awt.*;
class PanelLay extends Frame
 {
PanelLay(String s)
{
 this.setVisible(true);
 this.setTitle(s);
this.setSize(300,300);
Button b1,b2,b3,b4,b5,b6;
 b1=new Button("1");
b2=new Button("2");
b3=new Button("3");
 b4=new Button("4");
b5=new Button("5");
b6=new Button("6");
Panel p1=new Panel();
p1.add(b1);
p1.add(b2);
p1.add(b3);
add(p1,BorderLayout.NORTH);
Panel p2=new Panel();
p2.add(b4);
p2.add(b5);
p2.add(b6);
add(p2,BorderLayout.SOUTH);
 }
 public static void main(String[] args)
 {
 PanelLay p=new PanelLay("Panel Layout");
 }
 }
```

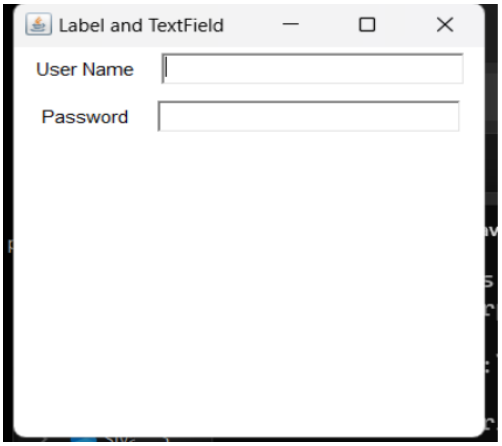
Output –



7.program to cteate label and textField

```
 import java.awt.*;
class LabelText extends Frame
{
 LabelText(String s)
 {
 this.setVisible(true);
 this.setTitle(s);
 this.setSize(300,300);
Label l1,l2;
 TextField t1,t2;
l1=new Label("User Name");
t1=new TextField(20);
Panel p1=new Panel();
p1.add(l1);
p1.add(t1);
add(p1,"North");
l2=new Label("Password");
t2=new TextField(20);
Panel p2=new Panel();
p2.add(l2);
p2.add(t2);
add(p2,"Center");
 }
 public static void main(String[] args)
 {
LabelText lt=new LabelText("Label and TextField");
}
}
```

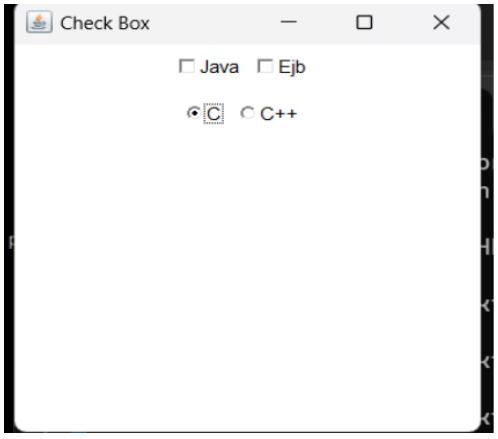
Output –



8.program to create checkbox

```
import java.awt.*;
class Cb extends Frame
{
 Cb(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
Checkbox cbjava,cbejb,cbc,cbcpp;
cbjava=new Checkbox("Java");
cbejb=new Checkbox("Ejb");
Panel p1=new Panel();
p1.add(cbjava);
p1.add(cbejb);
add(p1,BorderLayout.NORTH);
CheckboxGroup cg=new CheckboxGroup();
cbc=new Checkbox("C",true,cg);
cbcpp=new Checkbox("C++",false,cg);
Panel p2=new Panel();
p2.add(cbc);
p2.add(cbcpp);
add(p2,BorderLayout.CENTER);
}
public static void main(String[] args)
{
Cb c=new Cb("Check Box");
}
}
```

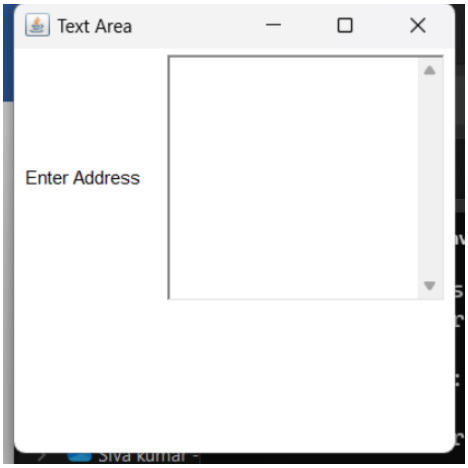
Output -



9.program to create TextArea

```
import java.awt.*;
class TxArea extends Frame
{
TxArea(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(600,600);
Label l=new Label("Enter Address");
TextArea t=new TextArea(10,20);
Panel p=new Panel();
p.add(l);
p.add(t);
add(p,BorderLayout.NORTH);
}
public static void main(String[] args)
{
TxArea tx=new TxArea("Text Area");
}
}
```

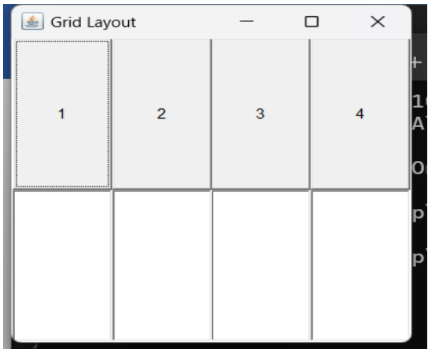
output -



10.program to create grid layout

```
import java.awt.*;
class Grid extends Frame
{
Grid(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
Button b1,b2,b3,b4;
TextField t1,t2,t3,t4;
b1=new Button("1");
b2=new Button("2");
b3=new Button("3");
b4=new Button("4");
t1=new TextField(" ");
t2=new TextField(" ");
t3=new TextField(" ");
t4=new TextField(" ");
setLayout(new GridLayout(2,4));
add(b1);
add(b2);
add(b3);
add(b4);
add(t1);
add(t2);
add(t3);
add(t4);
}
public static void main(String[] args)
{
Grid g=new Grid("Grid Layout");
} }
```

Output



11.Program on ActionListener

```
import java.awt.*;
import java.awt.event.*;
    class Action extends Frame implements ActionListener
    {
    Button bshow,bclose;
    Action(String s)
    {
    this.setVisible(true);
    this.setTitle(s);
    this.setSize(300,300);
    bshow=new Button("Show");
    bclose=new Button("Close");
    bshow.addActionListener(this);
    bclose.addActionListener(this);
    setLayout(new FlowLayout());
    add(bshow);
    add(bclose);
    }
    public void actionPerformed(ActionEvent ae)
    {
    if(ae.getSource().equals(bshow))
      System.out.println("Show Button is clicked");
    else if(ae.getSource().equals(bclose))
      System.exit(0);
    }
    public static void main(String[] args)
    {
    Action a=new Action("ActionListener Event Demo");
    }
    }
```

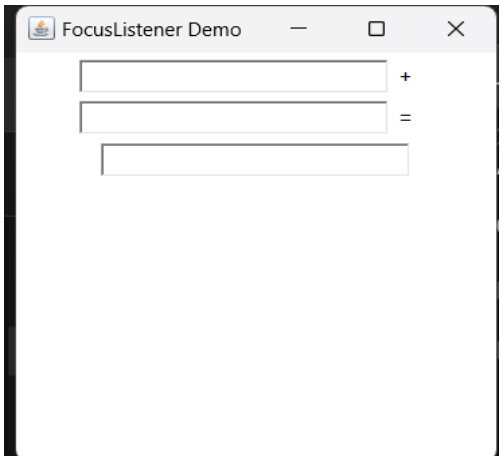
Output –

12.program on FocusListener

```
import java.awt.*;
import java.awt.event.*;
class Focus extends Frame implements FocusListener
{
TextField t1,t2,t3;
Label l1,l2;
Focus(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
t1=new TextField(20);
t2=new TextField(20);
l1=new Label("+");
l2=new Label("=");
t3=new TextField(20);
t3.addFocusListener(this);
setLayout(new FlowLayout());
add(t1);
add(l1);
add(t2);
add(l2);
add(t3);
}
public void focusGained(FocusEvent f)
{
int a=Integer.parseInt(t1.getText());
int b=Integer.parseInt(t2.getText());
t3.setText(" "+(a+b));
```

```
}
public void focusLost(FocusEvent f)
{
}
public static void main(String[] args)
{
Focus fe=new Focus("FocusListener Demo");
}
}
```

Output –



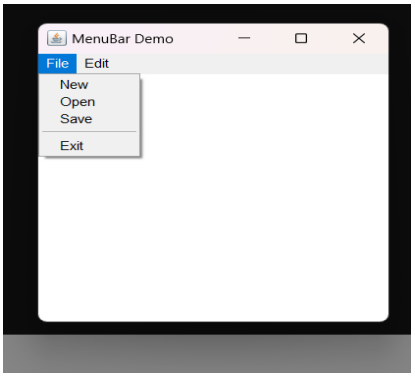
13.program to create Menu bar

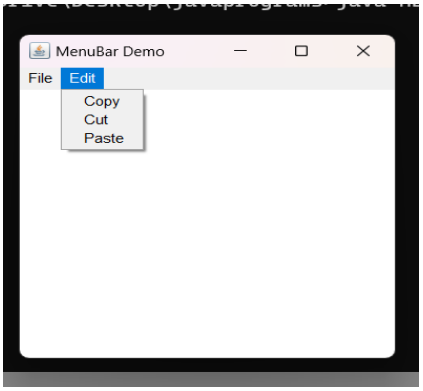
```
import java.awt.*;
import java.awt.event.*;
class MB extends Frame implements ActionListener
{
MenuBar menubar;
Menu file,edit;
MenuItem ne,open,save,exit,copy,cut,paste;
MB(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
menubar=new MenuBar();
file=new Menu("File");
edit=new Menu("Edit");
ne=new MenuItem("New");
open=new MenuItem("Open");
save=new MenuItem("Save");
exit=new MenuItem("Exit");
ne.addActionListener(this);
open.addActionListener(this);
save.addActionListener(this);
exit.addActionListener(this);
file.add(ne);
file.add(open);
file.add(save);
file.addSeparator();
```

```
file.add(exit);
copy=new MenuItem("Copy");
cut=new MenuItem("Cut");
paste=new MenuItem("Paste");
copy.addActionListener(this);
cut.addActionListener(this);
paste.addActionListener(this);
edit.add(copy);
edit.add(cut);
edit.add(paste);
menubar.add(file);
menubar.add(edit);
setMenuBar(menubar);
}
public void actionPerformed(ActionEvent e)
{
if(e.getSource().equals(ne))
   System.out.println("Selected New");
if(e.getSource().equals(open))
   System.out.println("Selected Open");
if(e.getSource().equals(save))
   System.out.println("Selected Save");
if(e.getSource().equals(exit))
   System.exit(0);
if(e.getSource().equals(copy))
   System.out.println("Selected copy");
if(e.getSource().equals(cut))
   System.out.println("Selected cut");
if(e.getSource().equals(paste))
   System.out.println("Selected paste");
```

```
}
public static void main(String[] args)
{
MB m=new MB("MenuBar Demo");
}
}
```

Output –



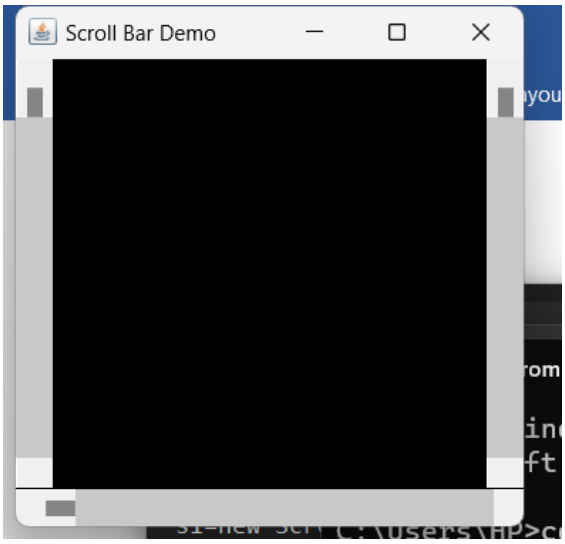


14.program to create ScrollBar

```
import java.awt.*;
import java.awt.event.*;
class SB extends Frame implements AdjustmentListener
{
Scrollbar s1,s2,s3;
Color cl;
SB(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
s1=new Scrollbar(Scrollbar.VERTICAL,0,5,0,255);
s2=new Scrollbar(Scrollbar.HORIZONTAL,0,5,0,255);
s3=new Scrollbar(Scrollbar.VERTICAL,0,5,0,255);
s1.addAdjustmentListener(this);
s2.addAdjustmentListener(this);
s3.addAdjustmentListener(this);
add(s1,BorderLayout.EAST);
add(s2,BorderLayout.SOUTH);
add(s3,BorderLayout.WEST);
}
public void adjustmentValueChanged(AdjustmentEvent ae)
{
repaint();
}
public void paint(Graphics g)
{
cl=new Color(s1.getValue(),s2.getValue(),s3.getValue());
setBackground(cl);
```

```
}
public static void main(String[] args)
{
SB s=new SB("Scroll Bar Demo");
}
}
```

Output-

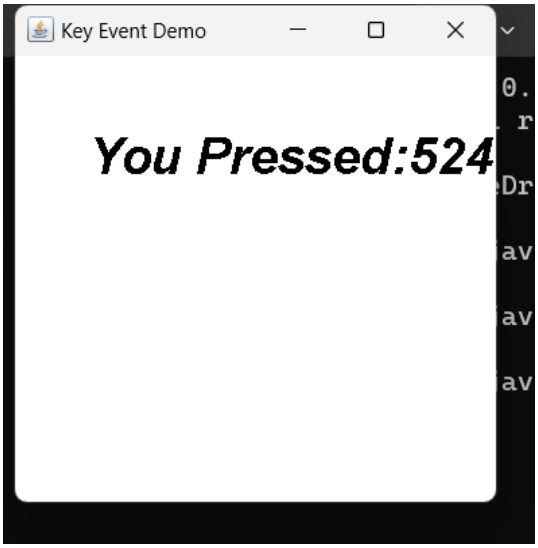


15.program to create Key event

```
import java.awt.*;
import java.awt.event.*;
class KE extends Frame implements KeyListener
{
String k1;
KE(String s)
{
this.setVisible(true);
this.setTitle(s);
this.setSize(300,300);
k1="";
addKeyListener(this);
}
public void keyPressed(KeyEvent ke)
{
k1="You Pressed"+ke.getKeyCode();
repaint();
}
public void keyTyped(KeyEvent ke)
{
k1="You Typed"+ke.getKeyChar();
repaint();
}
public void keyReleased(KeyEvent ke)
{
repaint();
}
public void paint(Graphics g)
{
```

```
Font f=new Font("Courier",Font.BOLD+Font.ITALIC,30);
g.setFont(f);
g.drawString(k1,50,100);
}
public static void main(String[] args)
{
KE fe=new KE("Key Event Demo");
}
}
```

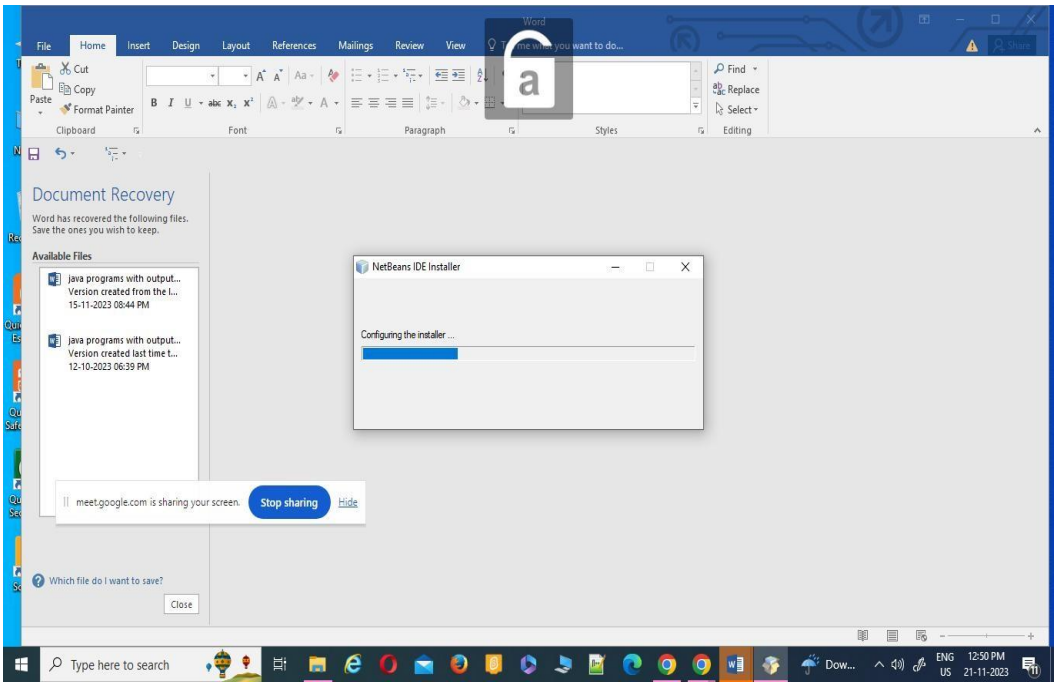
Output



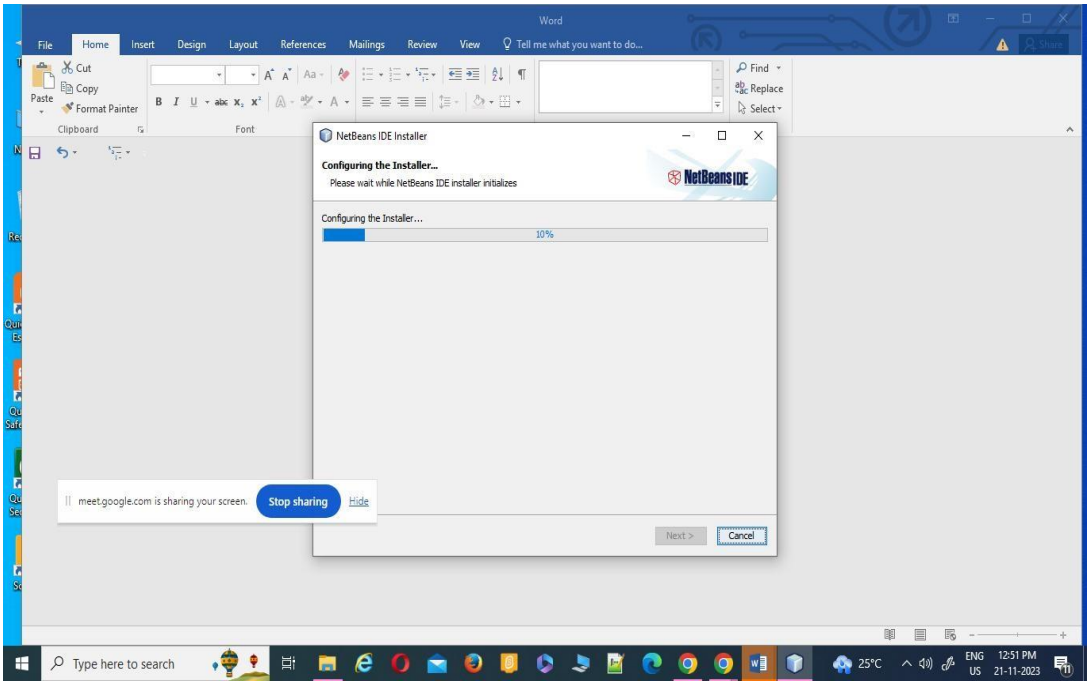
MINI PROJECT

SOFTWARE INSTALLATION:

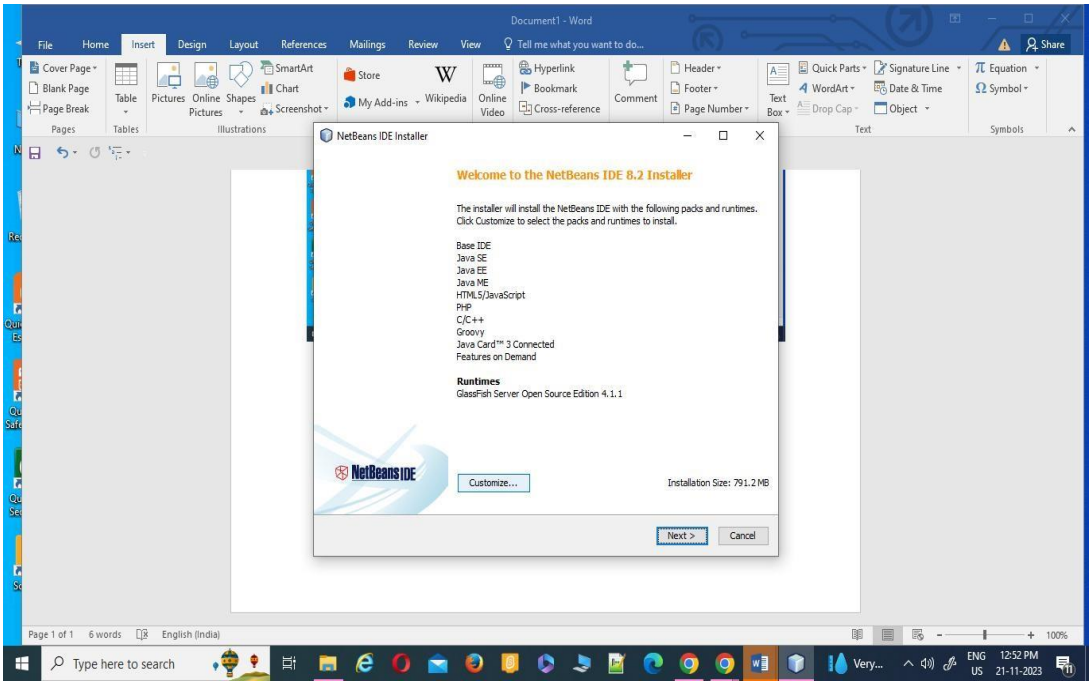
Double click on netbeans downloaded software.
We will get the below shown picture.



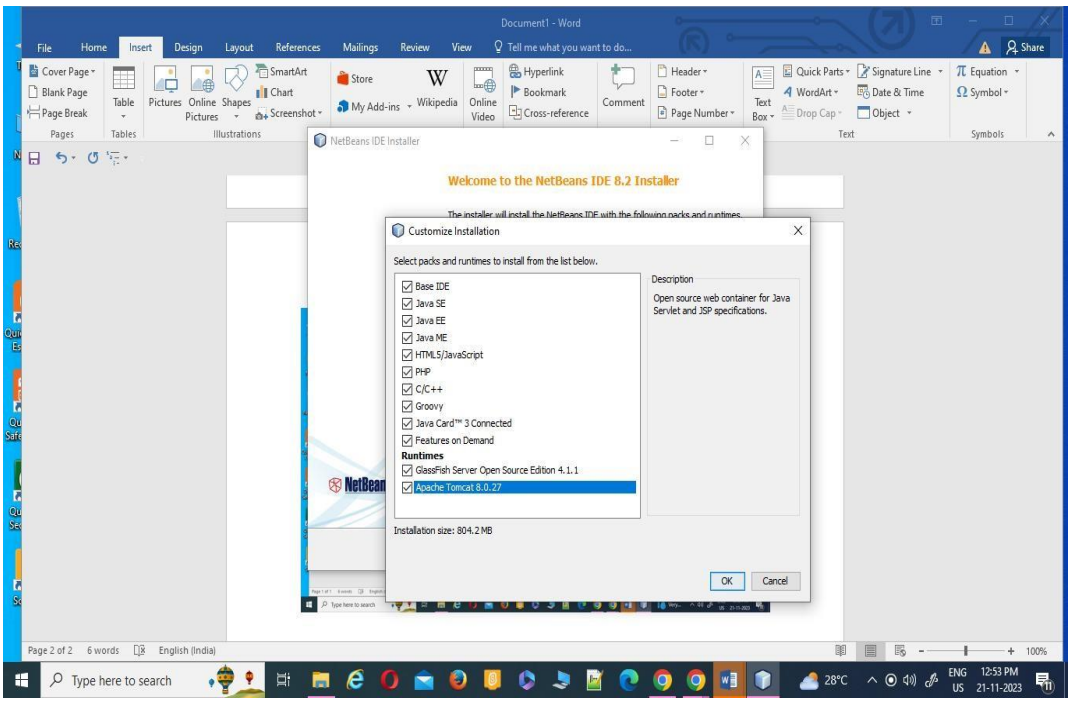
Make sure it should be completed 100%
Then we will get the below shown screenshot

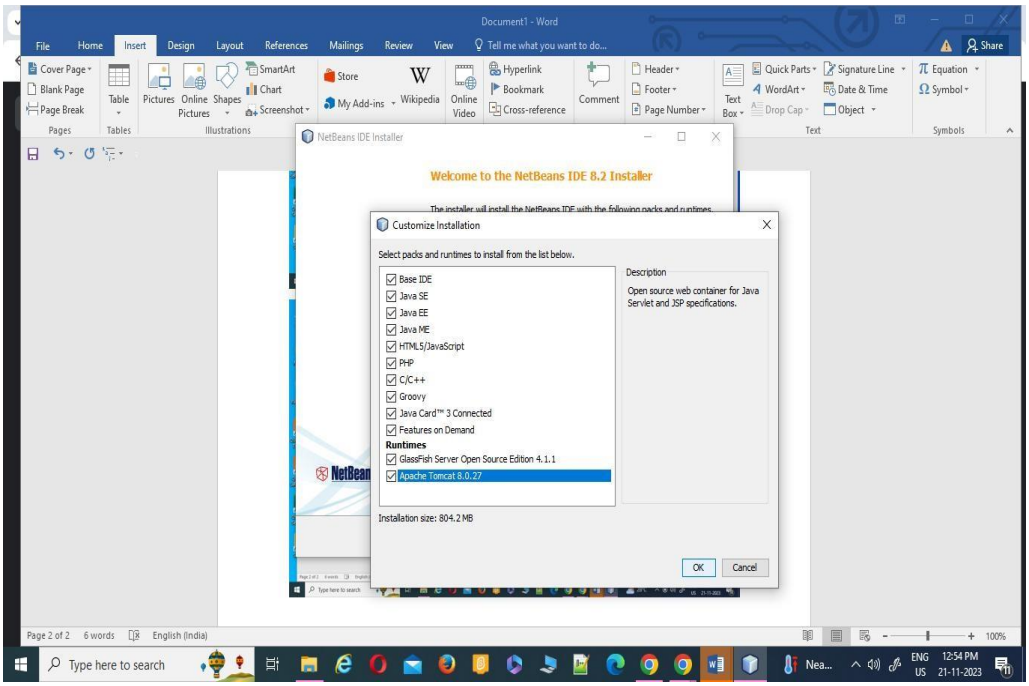


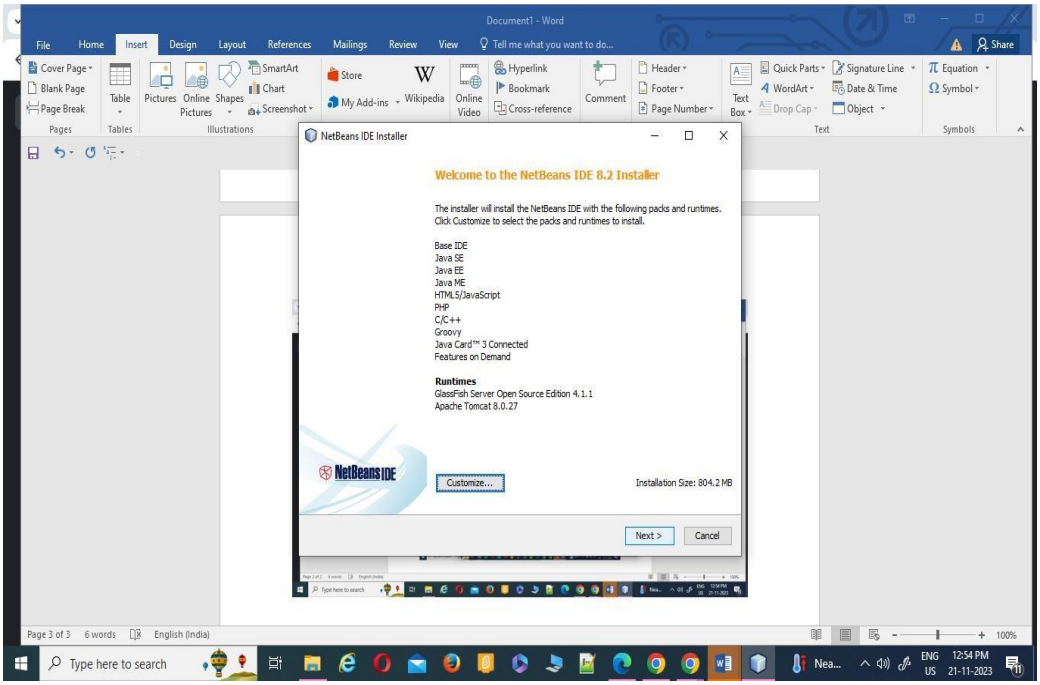
Then click on customize button.

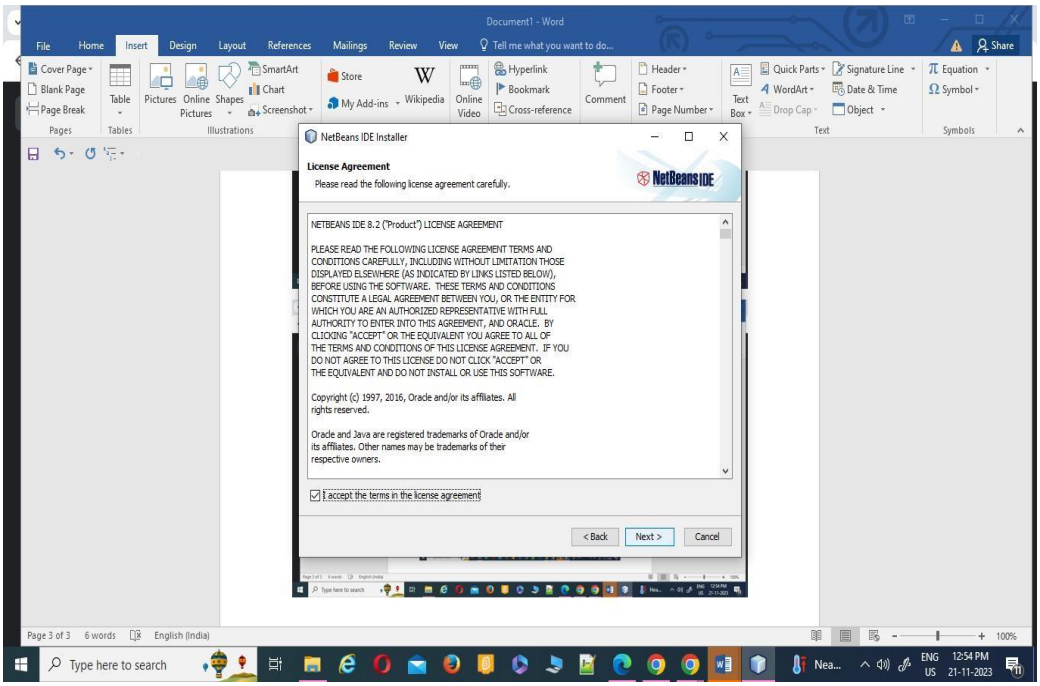


Then select checkbox Apache Tomcat Server and then click on ok button.




Document1 - Word
NetBeans IDE Installer
Welcome to the NetBeans IDE 8.2 Installer
Customize Installation
Select packs and runtimes to install from the list below.
Base IDE
Java SE
Java EE
Java ME
HTML5/JavaScript
PHP
C/C++
Groovy
Java Card™ 3 Connected
Features on Demand
Runtimes
GlassFish Server Open Source Edition 4.1.1
Apache Tomcat 8.0.27
Description
Open source web container for Java Servlet and JSP specifications.
Installation size: 804.2 MB
OK
Cancel


Document1 - Word
NetBeans IDE Installer
Welcome to the NetBeans IDE 8.2 Installer
The installer will install the NetBeans IDE with the following packs and runtimes.
Click Customize to select the packs and runtimes to install.
Base IDE
Java SE
Java EE
Java ME
HTML5/JavaScript
PHP
C/C++
Groovy
Java Card™ 3 Connected
Features on Demand
Runtimes
GlassFish Server Open Source Edition 4.1.1
Apache Tomcat 8.0.27
NetBeans IDE
Customize...
Installation Size: 804.2 MB
Next >
Cancel


Document1 - Word
NetBeans IDE Installer
License Agreement
Please read the following license agreement carefully.
NETBEANS IDE 8.2 ("Product") LICENSE AGREEMENT
PLEASE READ THE FOLLOWING LICENSE AGREEMENT TERMS AND CONDITIONS CAREFULLY, INCLUDING WITHOUT LIMITATION THOSE DISPLAYED ELSEWHERE (AS INDICATED BY LINKS LISTED BELOW), BEFORE USING THE SOFTWARE. THESE TERMS AND CONDITIONS CONSTITUTE A LEGAL AGREEMENT BETWEEN YOU, OR THE ENTITY FOR WHICH YOU ARE AN AUTHORIZED REPRESENTATIVE WITH FULL AUTHORITY TO ENTER INTO THIS AGREEMENT, AND ORACLE. BY CLICKING "ACCEPT" OR THE EQUIVALENT YOU AGREE TO ALL OF THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT. IF YOU DO NOT AGREE TO THIS LICENSE DO NOT CLICK "ACCEPT" OR THE EQUIVALENT AND DO NOT INSTALL OR USE THIS SOFTWARE.
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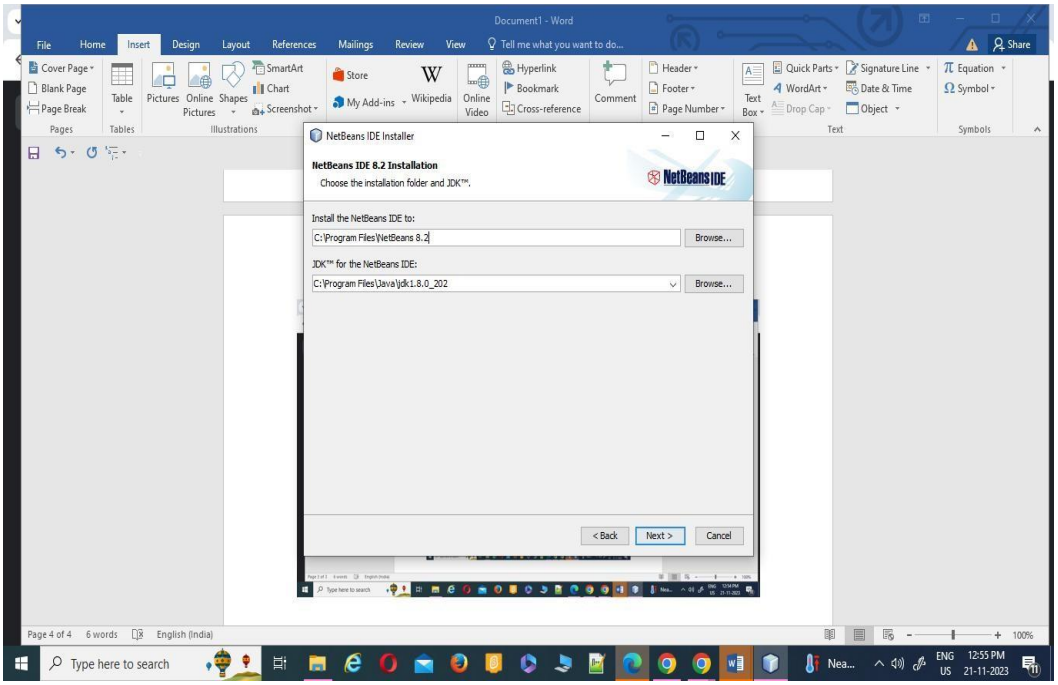
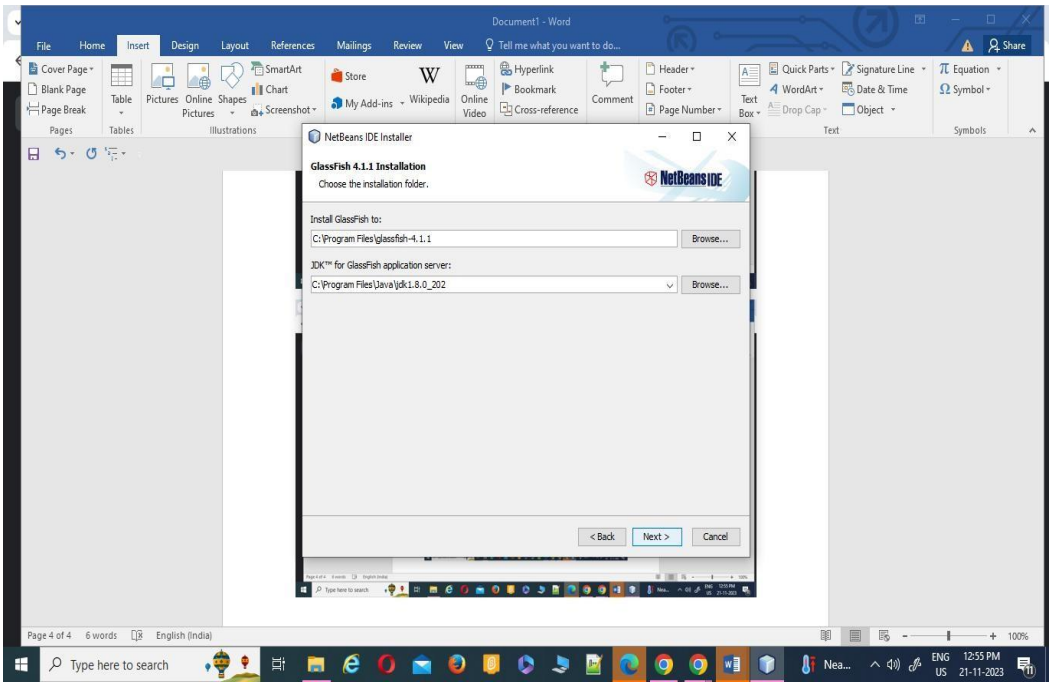
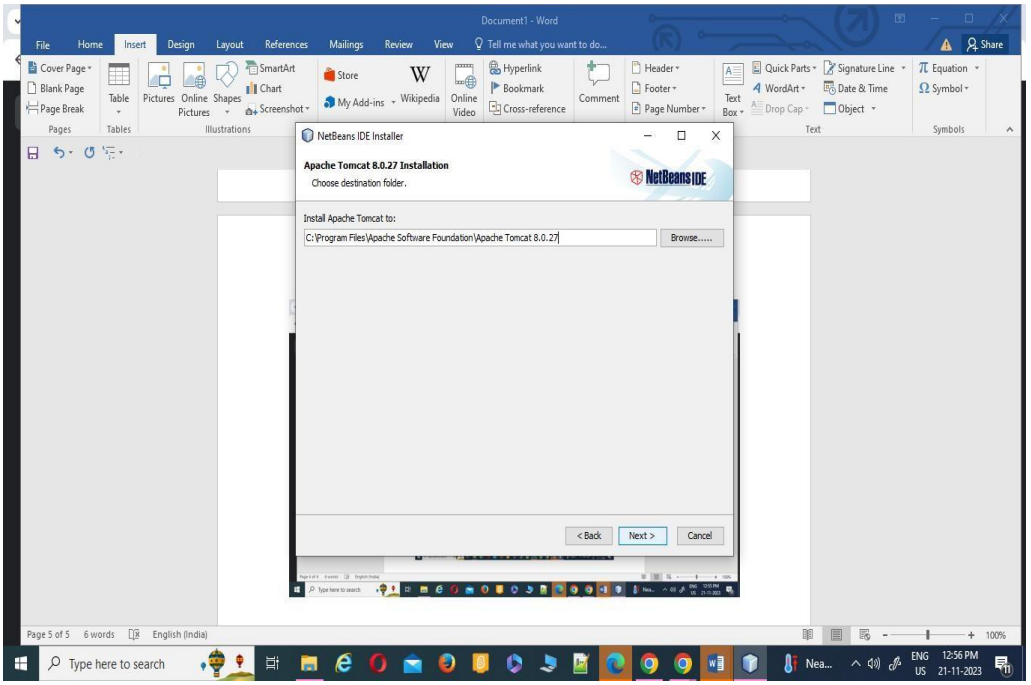
Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.
I accept the terms in the license agreement
< Back
Next >
Cancel


Document1 - Word
NetBeans IDE Installer
NetBeans IDE 8.2 Installation
Choose the installation folder and JDK™.
Install the NetBeans IDE to:
C:\Program Files\NetBeans 8.2
Browse...
JDK™ for the NetBeans IDE:
C:\Program Files\Java\jdk1.8.0_202
Browse...
< Back
Next >
Cancel


Document1 - Word
NetBeans IDE Installer
GlassFish 4.1.1 Installation
Choose the installation folder.
NetBeans IDE
Install GlassFish to:
C:\Program Files\glassfish-4.1.1
Browse...
JDK™ for GlassFish application server:
C:\Program Files\Java\jdk1.8.0_202
Browse...
< Back
Next >
Cancel
Page 4 of 4
6 words
English (India)
Type here to search
ENG
US
12:55 PM
21-11-2023


Document1 - Word
NetBeans IDE Installer
Apache Tomcat 8.0.27 Installation
Choose destination folder.
NetBeans IDE
Install Apache Tomcat to:
C:\Program Files\Apache Software Foundation\Apache Tomcat 8.0.27
Browse.....
< Back
Next >
Cancel
Page 5 of 5
6 words
English (India)
Type here to search
ENG
US
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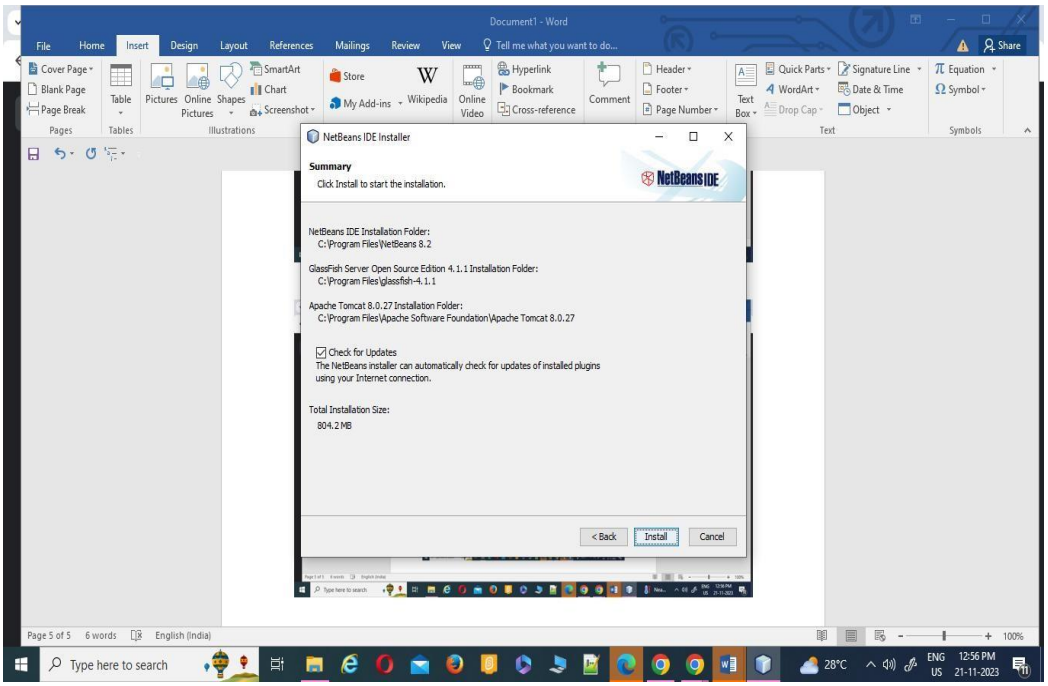
21-11-2023


Document1 - Word
NetBeans IDE Installer
Summary
Click Install to start the installation.
NetBeans IDE
NetBeans IDE Installation Folder:
C:\Program Files\NetBeans 8.2
GlassFish Server Open Source Edition 4.1.1 Installation Folder:
C:\Program Files\glassfish-4.1.1
Apache Tomcat 8.0.27 Installation Folder:
C:\Program Files\Apache Software Foundation\Apache Tomcat 8.0.27
Check for Updates
The NetBeans installer can automatically check for updates of installed plugins using your Internet connection.
Total Installation Size:
804.2 MB
< Back
Install
Cancel
Page 5 of 5
6 words
English (India)
Type here to search
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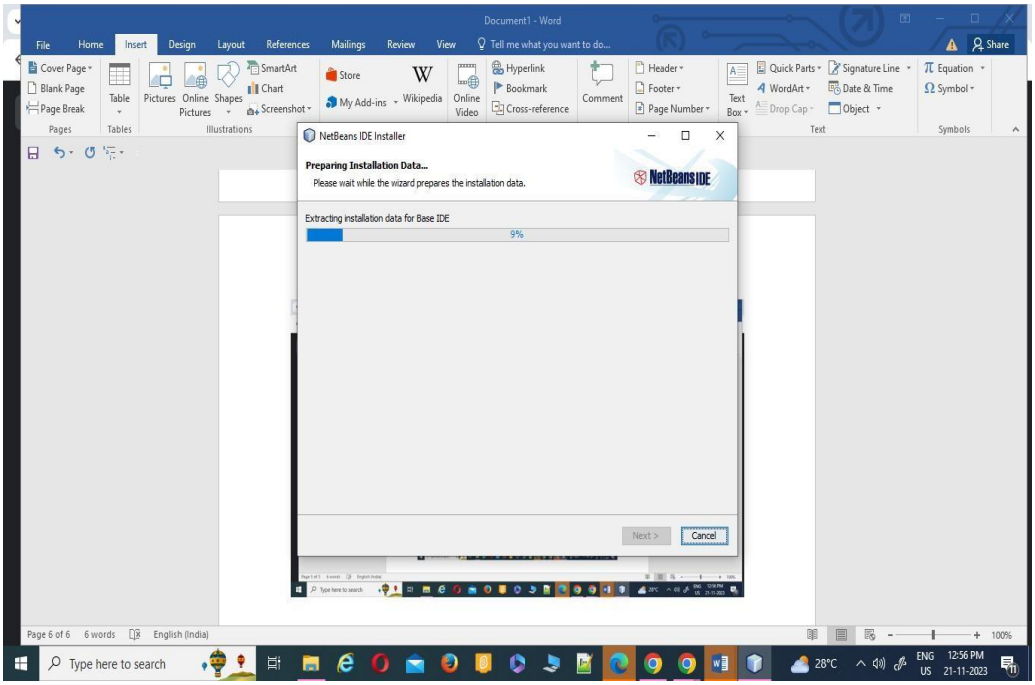
12:56 PM
21-11-2023


Document1 - Word
NetBeans IDE Installer
Preparing Installation Data...
Please wait while the wizard prepares the installation data.
NetBeans IDE
Extracting installation data for Base IDE
9%
Next >
Cancel
Page 6 of 6
6 words
English (India)
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ENG
US
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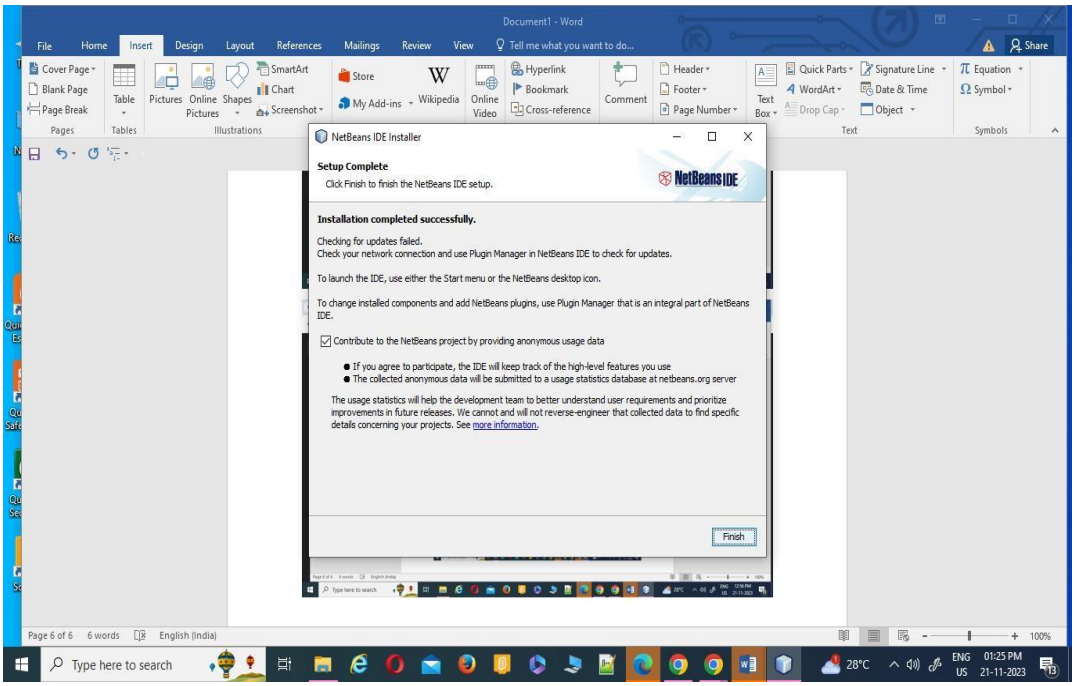
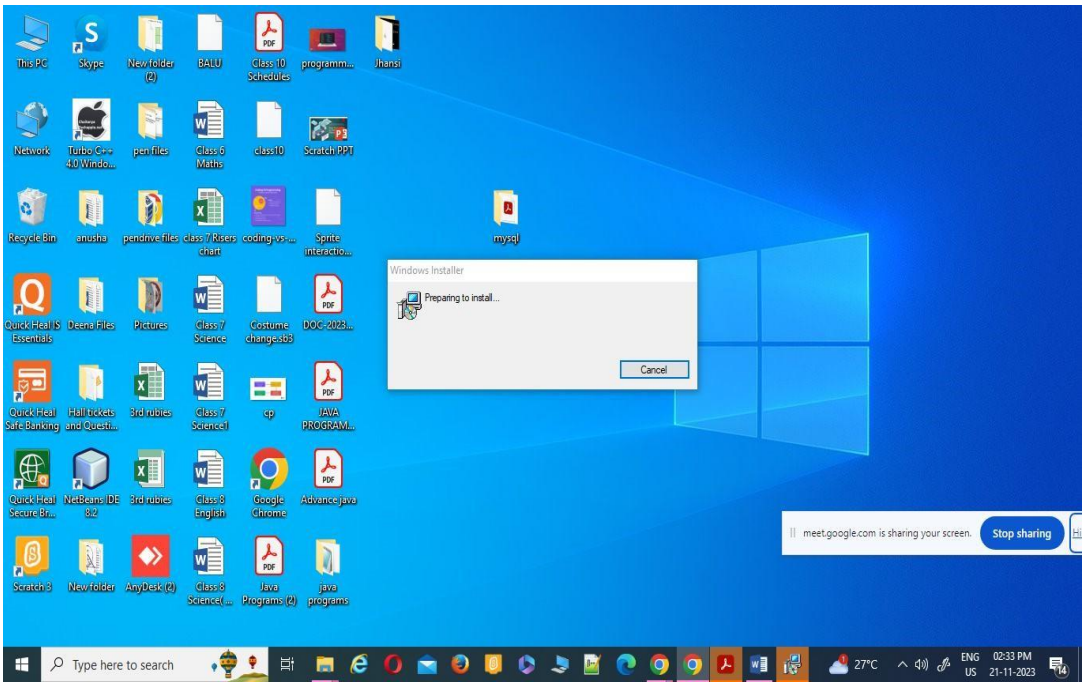
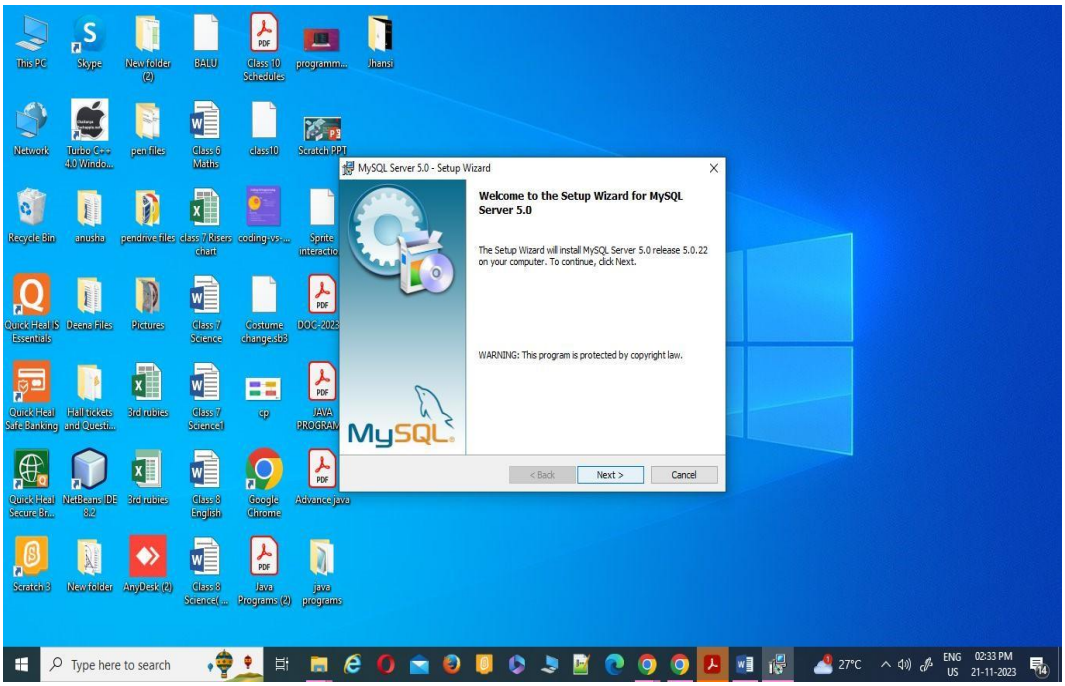
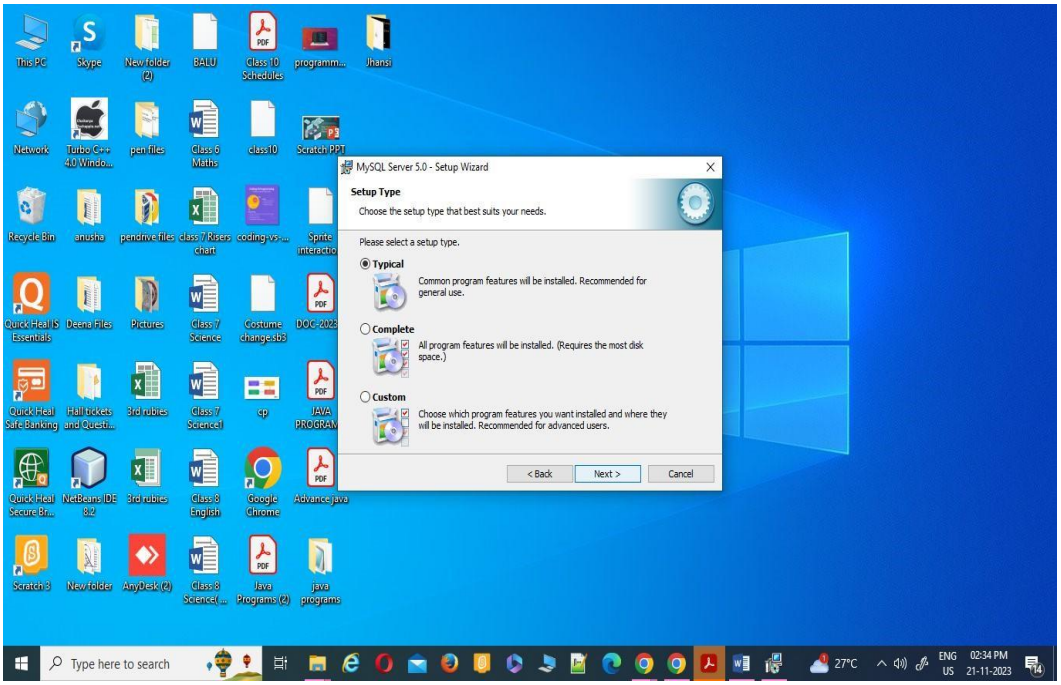
21-11-2023

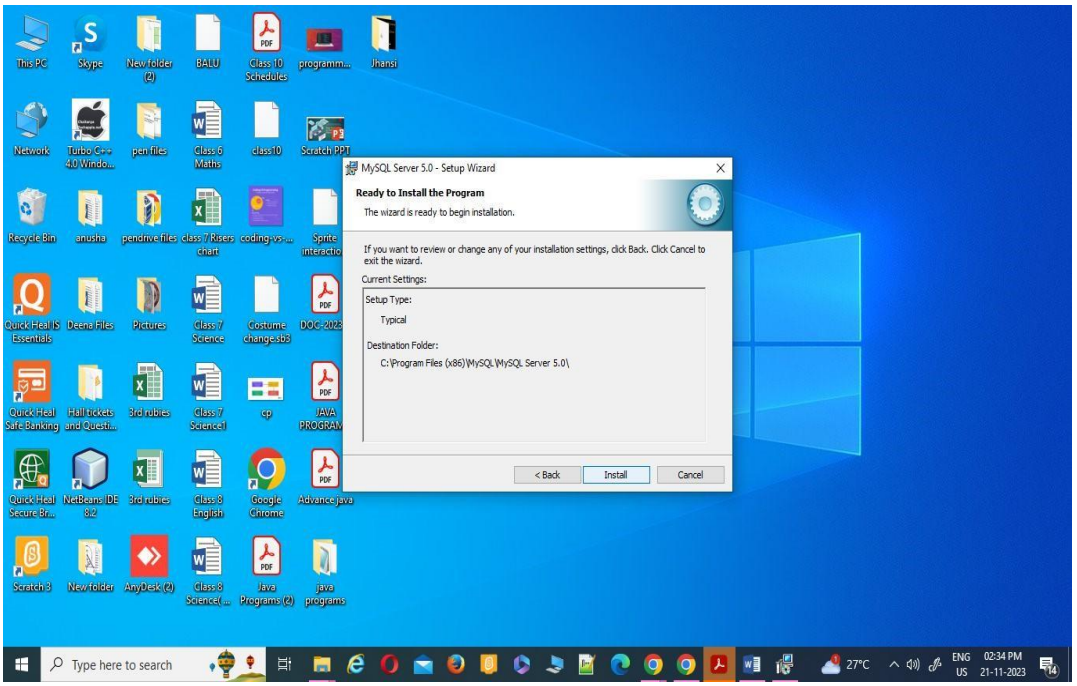


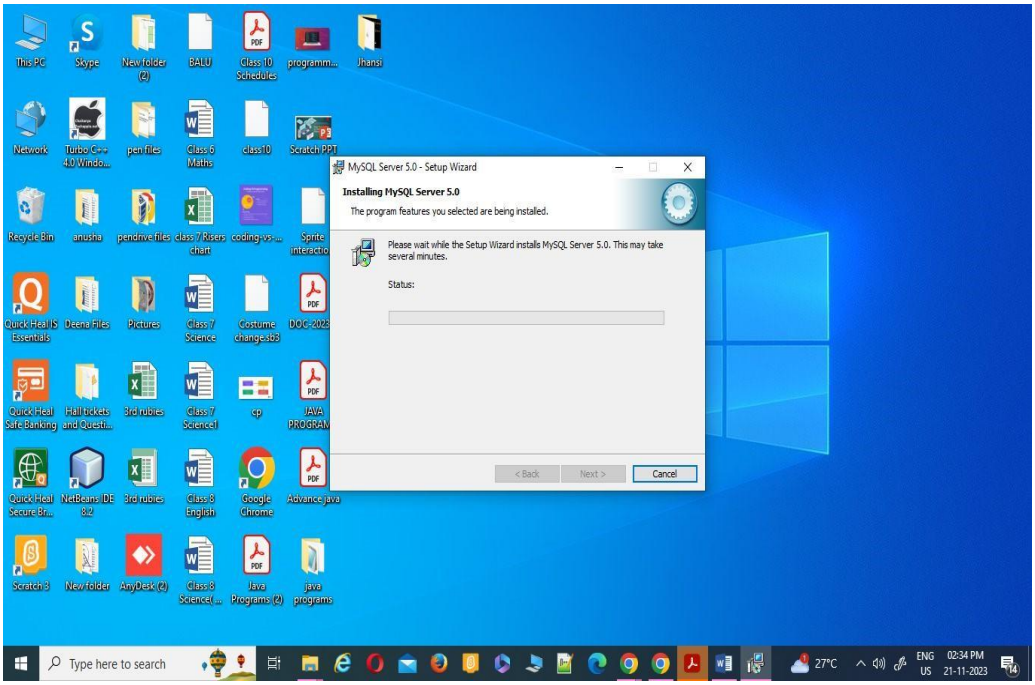
Procedure to install my sql
Setup file

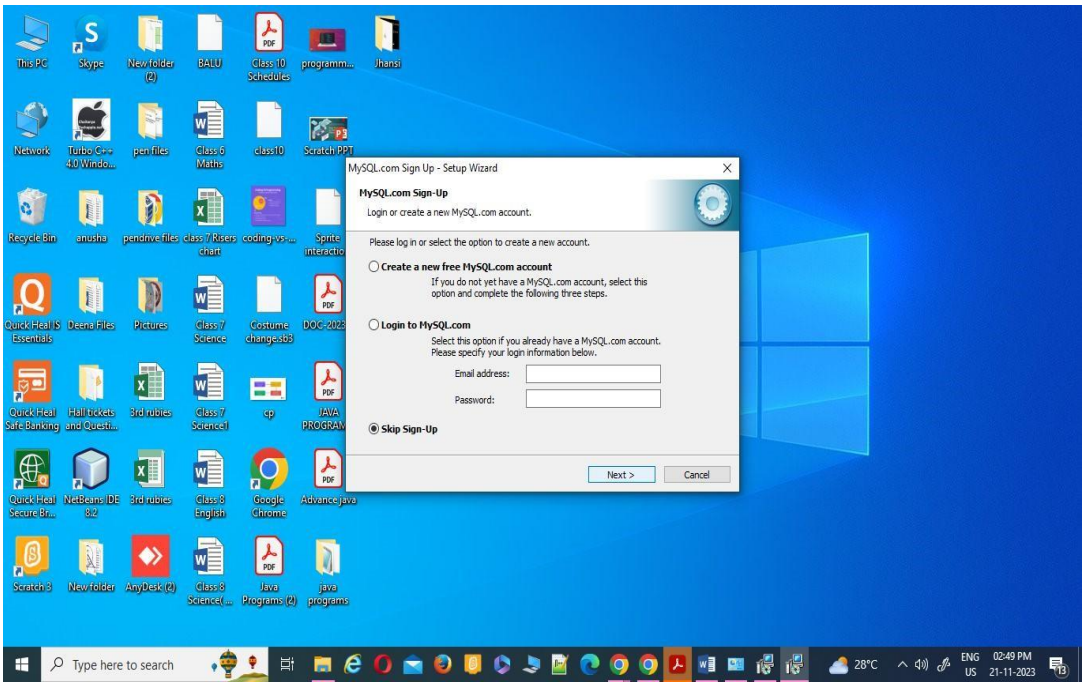


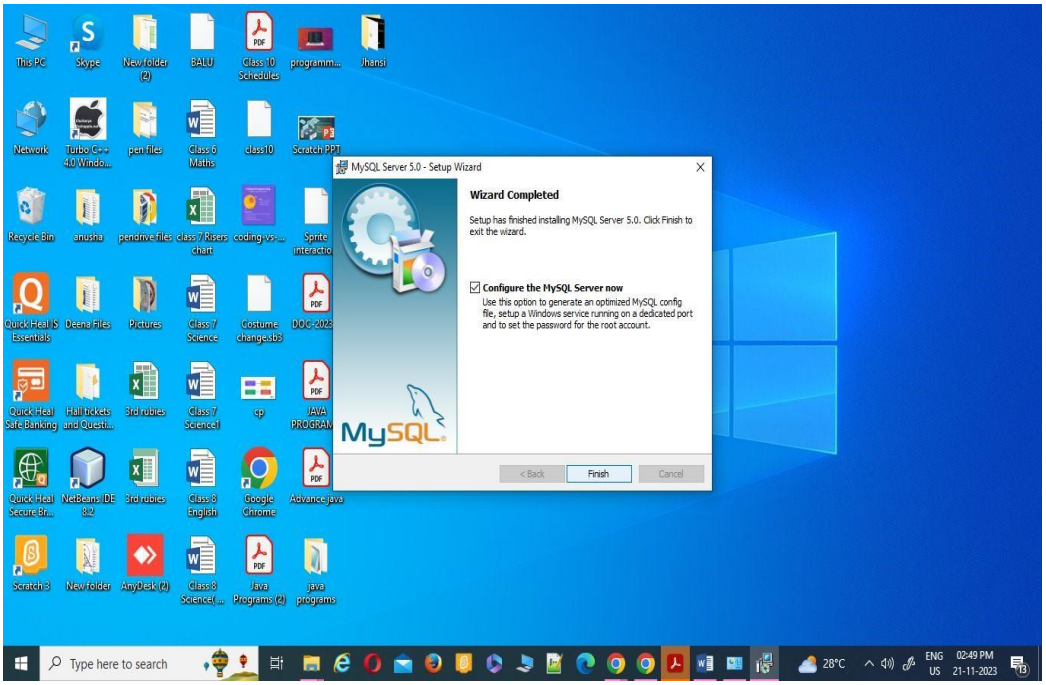

MySQL Server 5.0 - Setup Wizard
Welcome to the Setup Wizard for MySQL Server 5.0
The Setup Wizard will install MySQL Server 5.0 release 5.0.22 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law.
MySQL
< Back
Next >
Cancel
Type here to search
27°C
ENG US
02:33 PM
21-11-2023

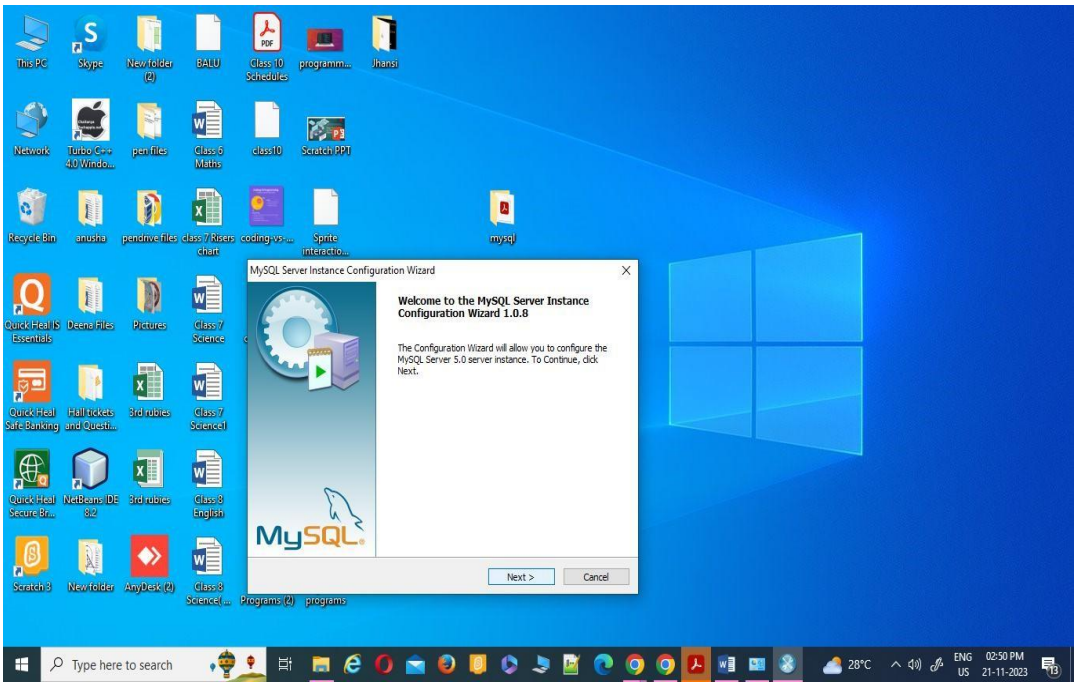

MySQL Server 5.0 - Setup Wizard
Setup Type
Choose the setup type that best suits your needs.
Please select a setup type.
Typical
Common program features will be installed. Recommended for general use.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
< Back
Next >
Cancel
Type here to search
27°C
ENG US
02:34 PM
21-11-2023

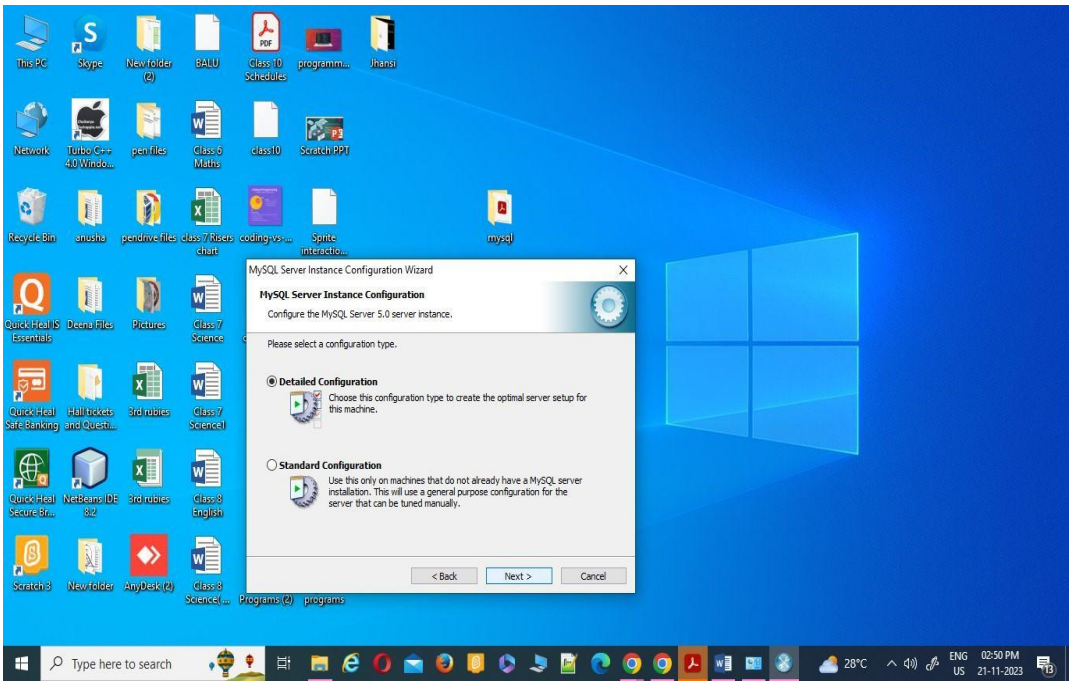

MySQL Server 5.0 - Setup Wizard
Ready to Install the Program
The wizard is ready to begin installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Current Settings:
Setup Type:
Typical
Destination Folder:
C:\Program Files (x86)\MySQL\MySQL Server 5.0\
< Back
Install
Cancel
Type here to search
27°C
ENG
US
02:34 PM
21-11-2023

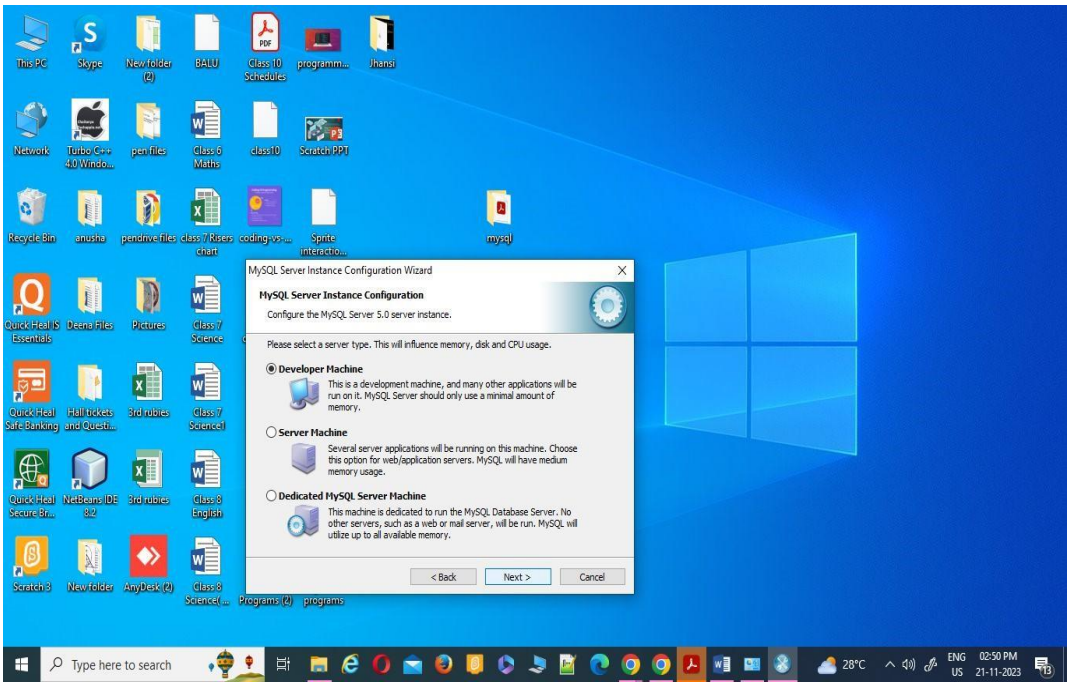

MySQL Server 5.0 - Setup Wizard
Installing MySQL Server 5.0
The program features you selected are being installed.
Please wait while the Setup Wizard installs MySQL Server 5.0. This may take several minutes.
Status:
< Back
Next >
Cancel
Type here to search
27°C
ENG
US
02:34 PM
21-11-2023

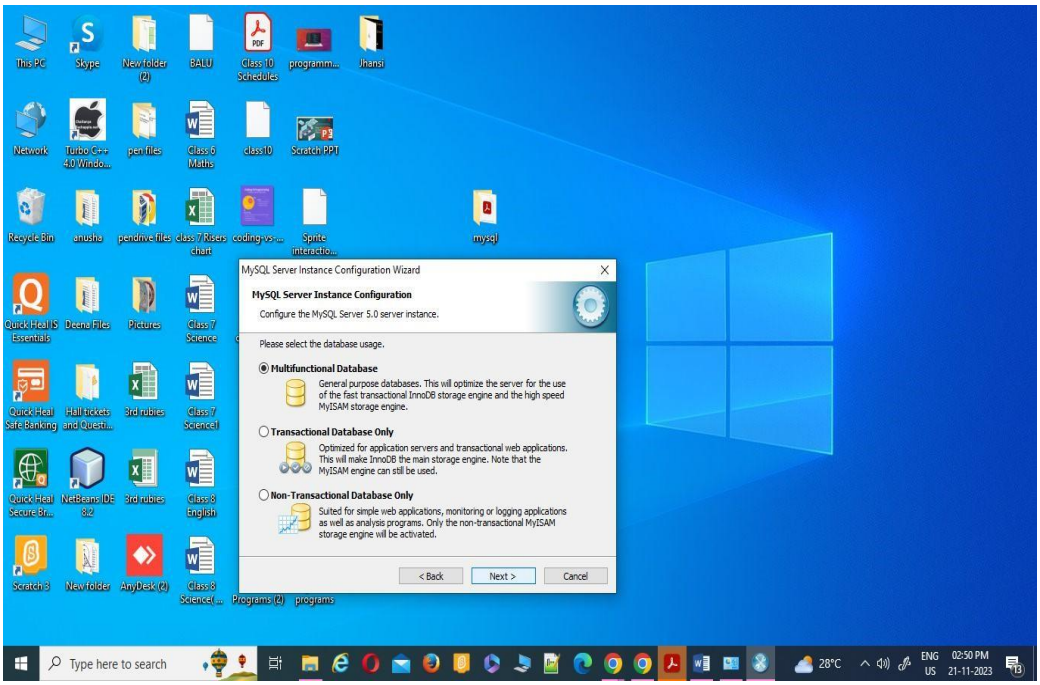

MySQL.com Sign Up - Setup Wizard
MySQL.com Sign-Up
Login or create a new MySQL.com account.
Please log in or select the option to create a new account.
Create a new free MySQL.com account
If you do not yet have a MySQL.com account, select this option and complete the following three steps.
Login to MySQL.com
Select this option if you already have a MySQL.com account. Please specify your login information below.
Email address:
Password:
Skip Sign-Up
Next >
Cancel

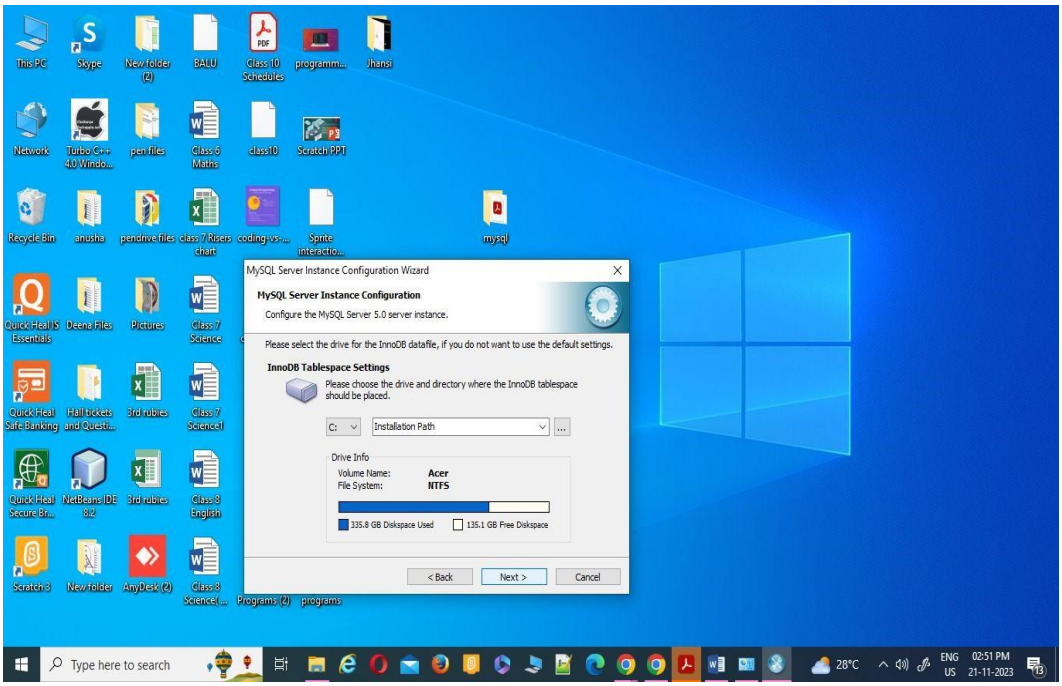

MySQL Server 5.0 - Setup Wizard
Wizard Completed
Setup has finished installing MySQL Server 5.0. Click Finish to exit the wizard.
Configure the MySQL Server now
Use this option to generate an optimized MySQL config file, setup a Windows service running on a dedicated port and to set the password for the root account.
< Back
Finish
Cancel

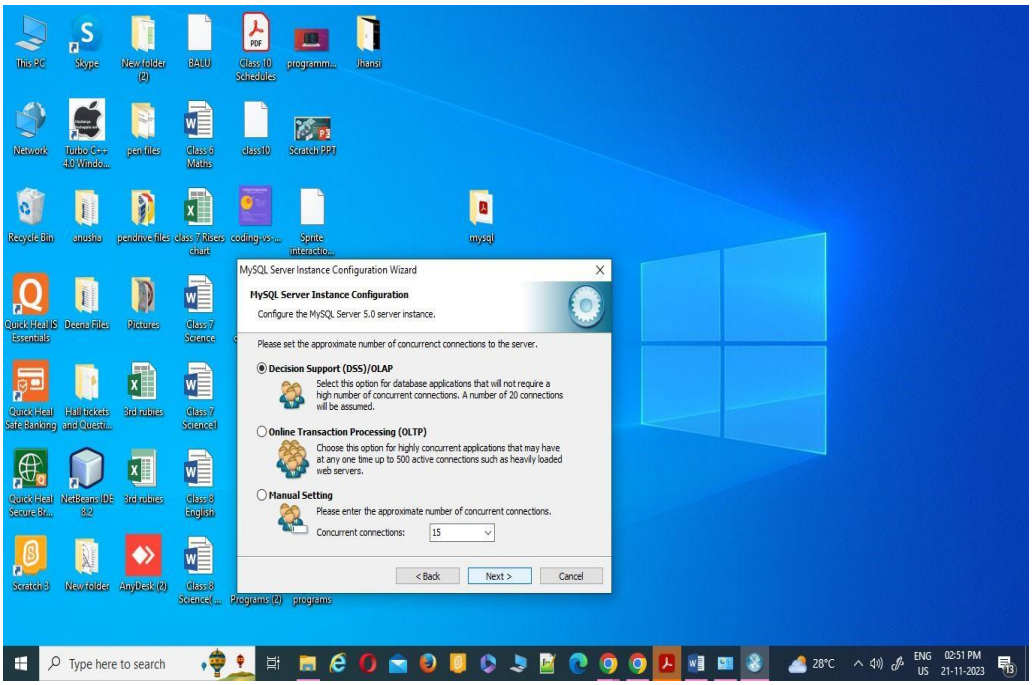

MySQL Server Instance Configuration Wizard
Welcome to the MySQL Server Instance Configuration Wizard 1.0.8
The Configuration Wizard will allow you to configure the MySQL Server 5.0 server instance. To Continue, click Next.
MySQL
Next >
Cancel
Type here to search
28°C
ENG US
02:50 PM 21-11-2023

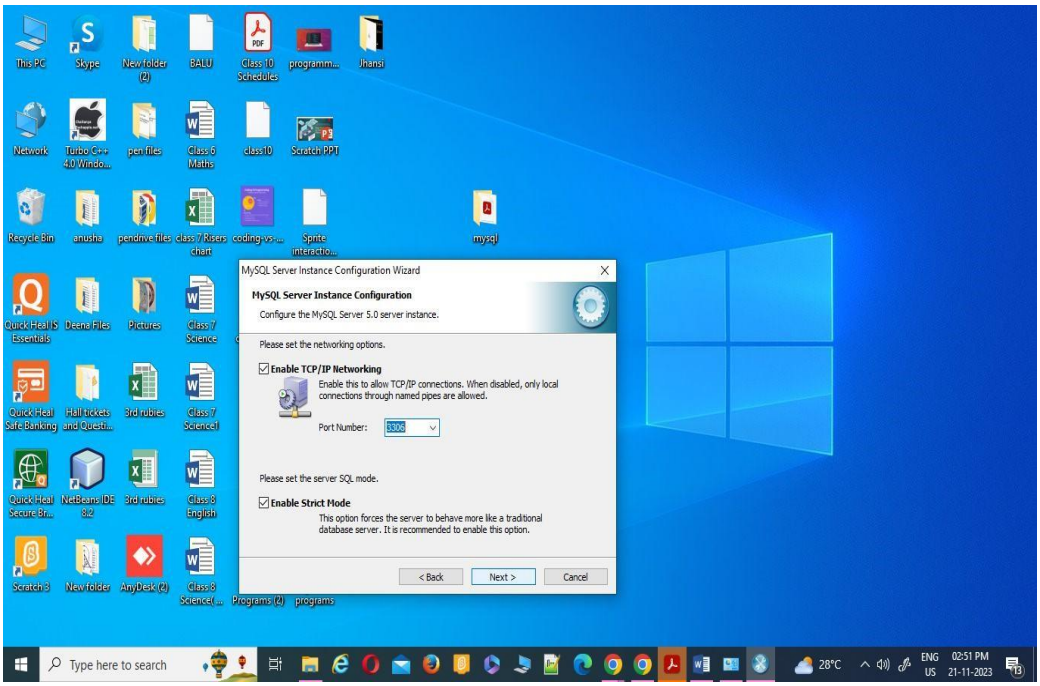

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please select a configuration type.
Detailed Configuration
Choose this configuration type to create the optimal server setup for this machine.
Standard Configuration
Use this only on machines that do not already have a MySQL server installation. This will use a general purpose configuration for the server that can be tuned manually.
< Back
Next >
Cancel
Type here to search
28°C
ENG US
02:50 PM 21-11-2023

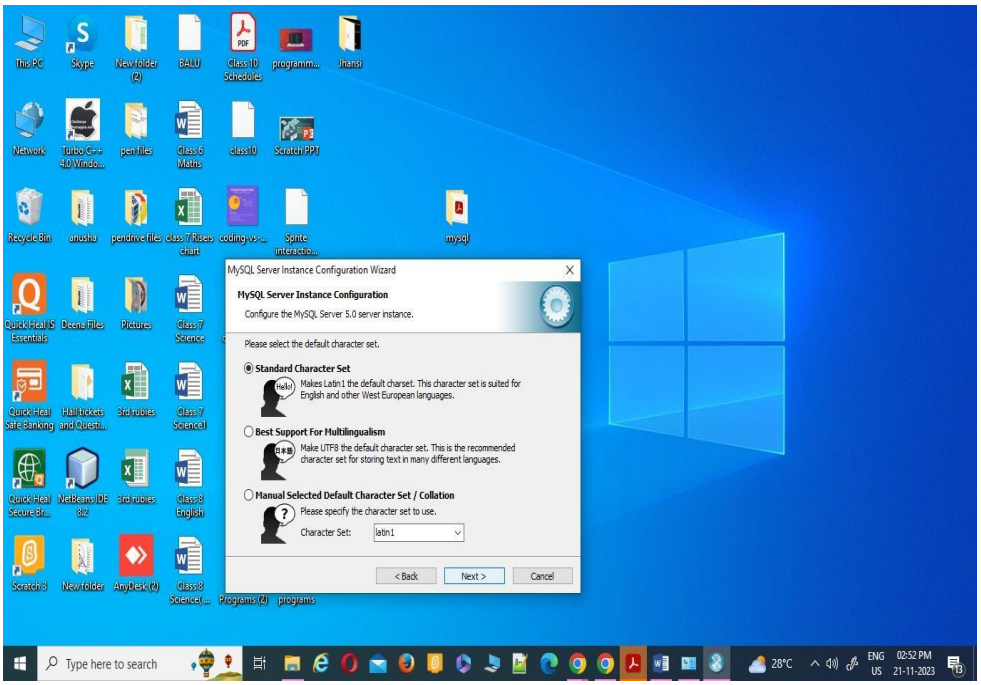

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please select a server type. This will influence memory, disk and CPU usage.
Developer Machine
This is a development machine, and many other applications will be run on it. MySQL Server should only use a minimal amount of memory.
Server Machine
Several server applications will be running on this machine. Choose this option for web/application servers. MySQL will have medium memory usage.
Dedicated MySQL Server Machine
This machine is dedicated to run the MySQL Database Server. No other servers, such as a web or mail server, will be run. MySQL will utilize up to all available memory.
< Back
Next >
Cancel

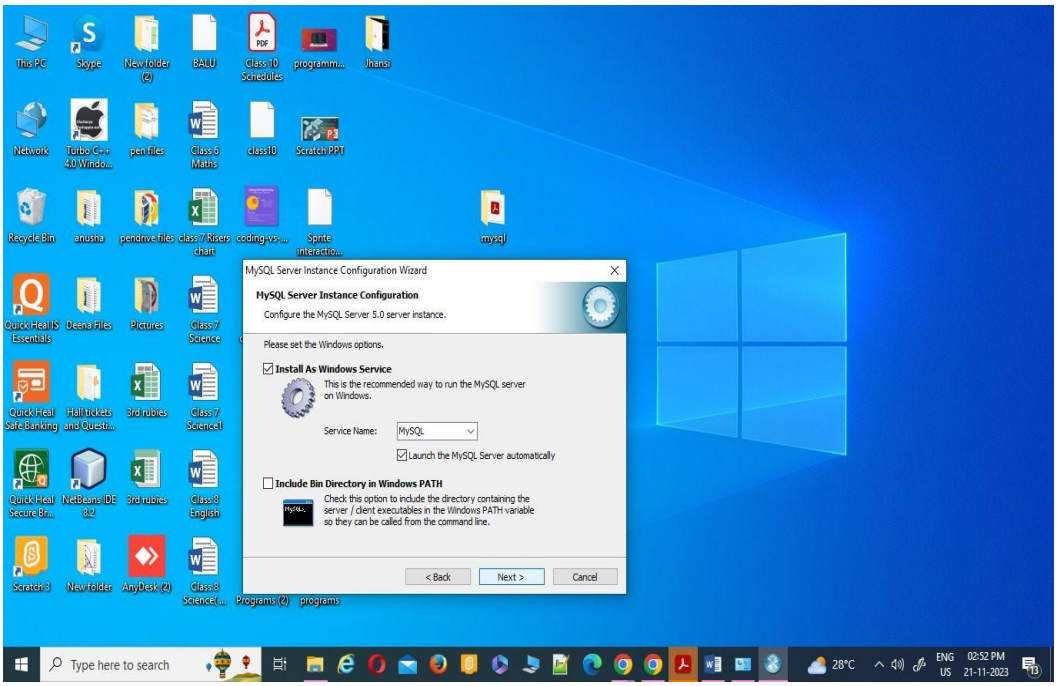

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please select the database usage.
Multifunctional Database
General purpose databases. This will optimize the server for the use of the fast transactional InnoDB storage engine and the high speed MyISAM storage engine.
Transactional Database Only
Optimized for application servers and transactional web applications. This will make InnoDB the main storage engine. Note that the MyISAM engine can still be used.
Non-Transactional Database Only
Suited for simple web applications, monitoring or logging applications as well as analysis programs. Only the non-transactional MyISAM storage engine will be activated.
< Back
Next >
Cancel


MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please select the drive for the InnoDB datafile, if you do not want to use the default settings.
InnoDB Tablespace Settings
Please choose the drive and directory where the InnoDB tablespace should be placed.
C:
Installation Path
Drive Info
Volume Name: Acer
File System: NTFS
335.8 GB Diskspace Used
135.1 GB Free Diskspace
< Back
Next >
Cancel
Type here to search
28°C
ENG US
02:51 PM
21-11-2023

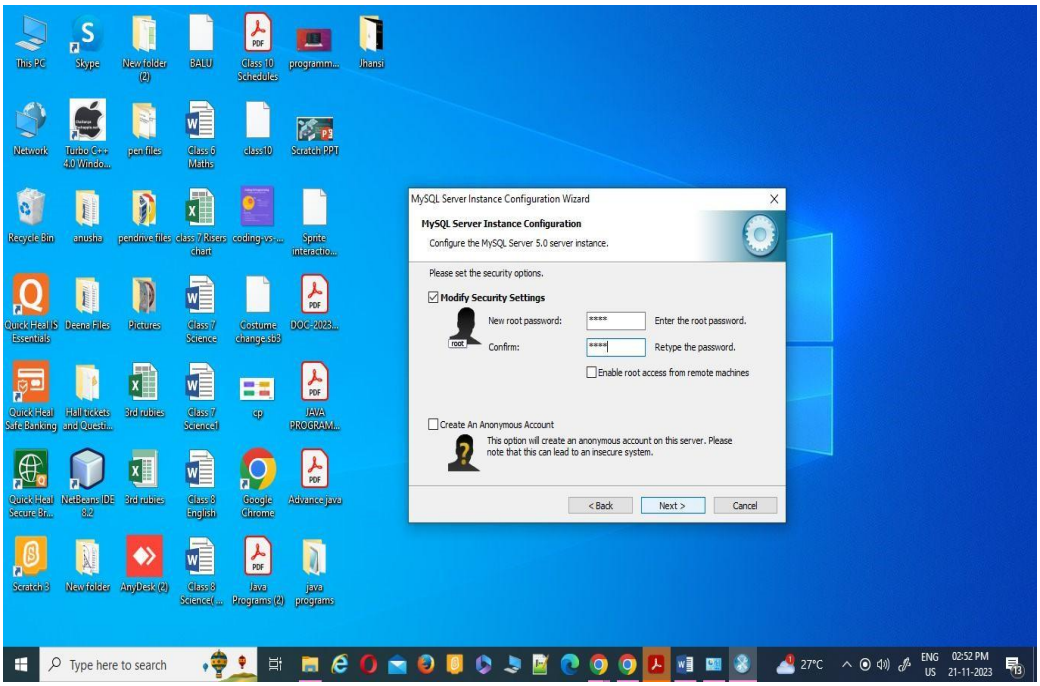

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please set the approximate number of concurrent connections to the server.
Decision Support (DSS)/OLAP
Select this option for database applications that will not require a high number of concurrent connections. A number of 20 connections will be assumed.
Online Transaction Processing (OLTP)
Choose this option for highly concurrent applications that may have at any one time up to 500 active connections such as heavily loaded web servers.
Manual Setting
Please enter the approximate number of concurrent connections.
Concurrent connections:
15
< Back
Next >
Cancel
Type here to search
28°C
ENG US
02:51 PM
21-11-2023

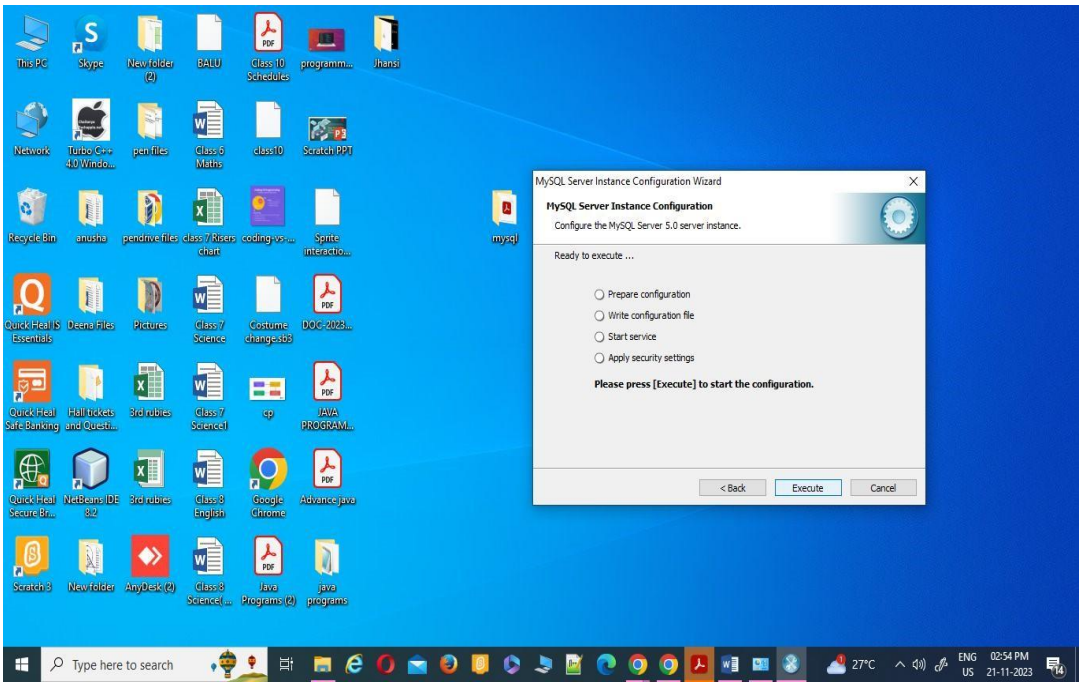

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please set the networking options.
Enable TCP/IP Networking
Enable this to allow TCP/IP connections. When disabled, only local connections through named pipes are allowed.
Port Number: 3306
Please set the server SQL mode.
Enable Strict Mode
This option forces the server to behave more like a traditional database server. It is recommended to enable this option.
< Back
Next >
Cancel

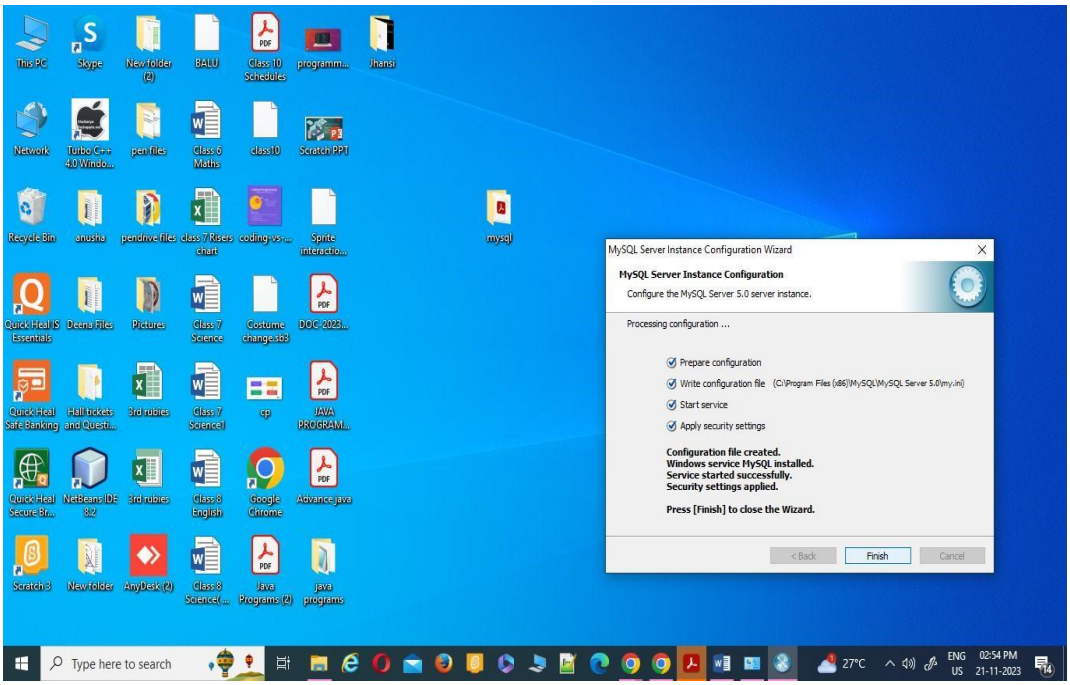

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 5.0 server instance.
Please select the default character set.
Standard Character Set
Makes Latin1 the default charset. This character set is suited for English and other West European languages.
Best Support For Multilingualism
Make UTF8 the default character set. This is the recommended character set for storing text in many different languages.
Manual Selected Default Character Set / Collation
Please specify the character set to use.
Character Set: latin1
< Back
Next >
Cancel



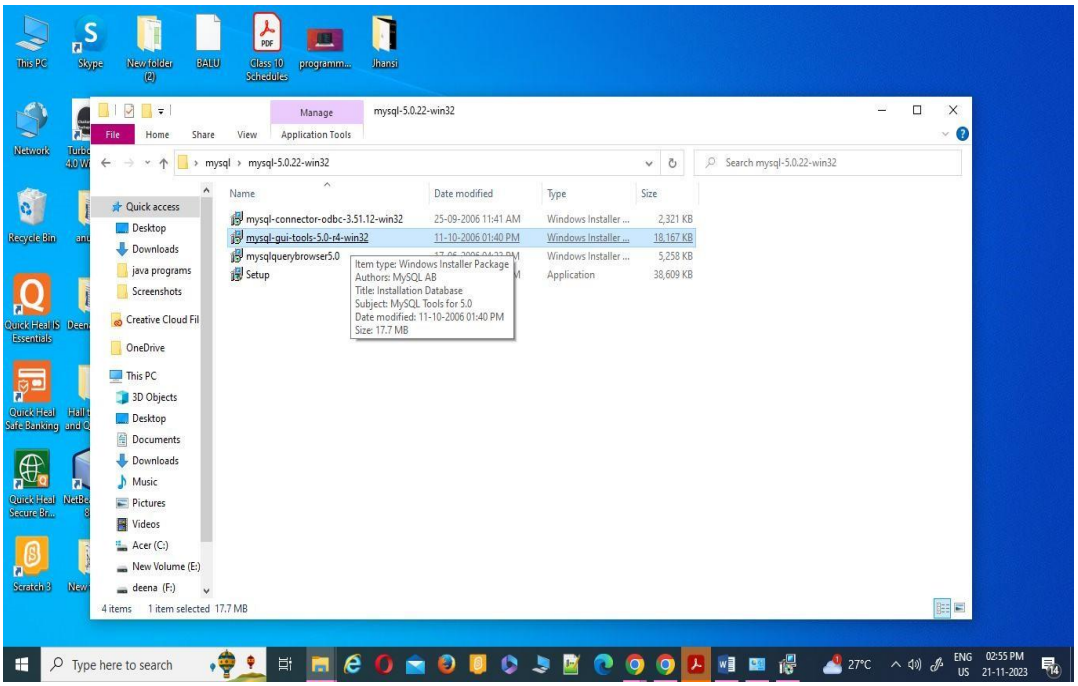
Enter password root
Retype password root

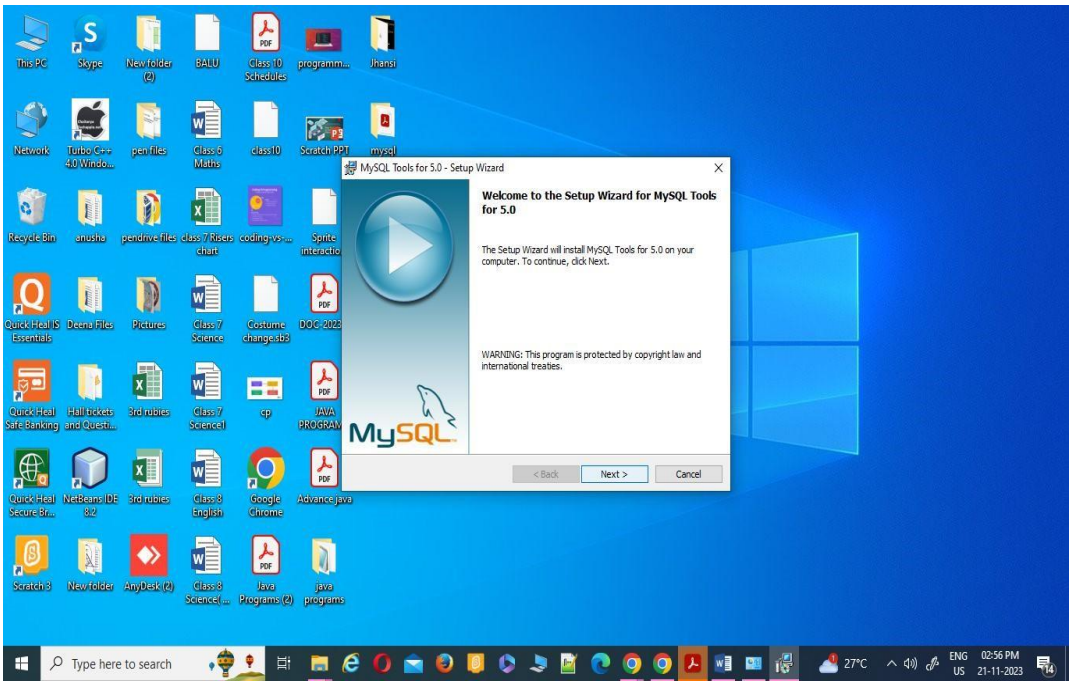






Gui tool installation


mysql-5.0.22-win32
Manage
File
Home
Share
View
Application Tools
mysql › mysql-5.0.22-win32
Search mysql-5.0.22-win32
Quick access
Desktop
Downloads
java programs
Screenshots
Creative Cloud Fil
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
Acer (C:)
New Volume (E:)
deena (F:)
Name
Date modified
Type
Size
mysql-connector-odbc-3.51.12-win32
25-09-2006 11:41 AM
Windows Installer ...
2,321 KB
mysql-gui-tools-5.0-r4-win32
11-10-2006 01:40 PM
Windows Installer ...
18,167 KB
mysqlquerybrowser5.0
Windows Installer ...
5,258 KB
Setup
Application
38,609 KB
Item type: Windows Installer Package
Authors: MySQL AB
Title: Installation Database
Subject: MySQL Tools for 5.0
Date modified: 11-10-2006 01:40 PM
Size: 17.7 MB
4 items
1 item selected 17.7 MB
Type here to search
27°C
ENG
US
02:55 PM
21-11-2023


MySQL Tools for 5.0 - Setup Wizard
Welcome to the Setup Wizard for MySQL Tools for 5.0
The Setup Wizard will install MySQL Tools for 5.0 on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
MySQL
< Back
Next >
Cancel
Type here to search
27°C
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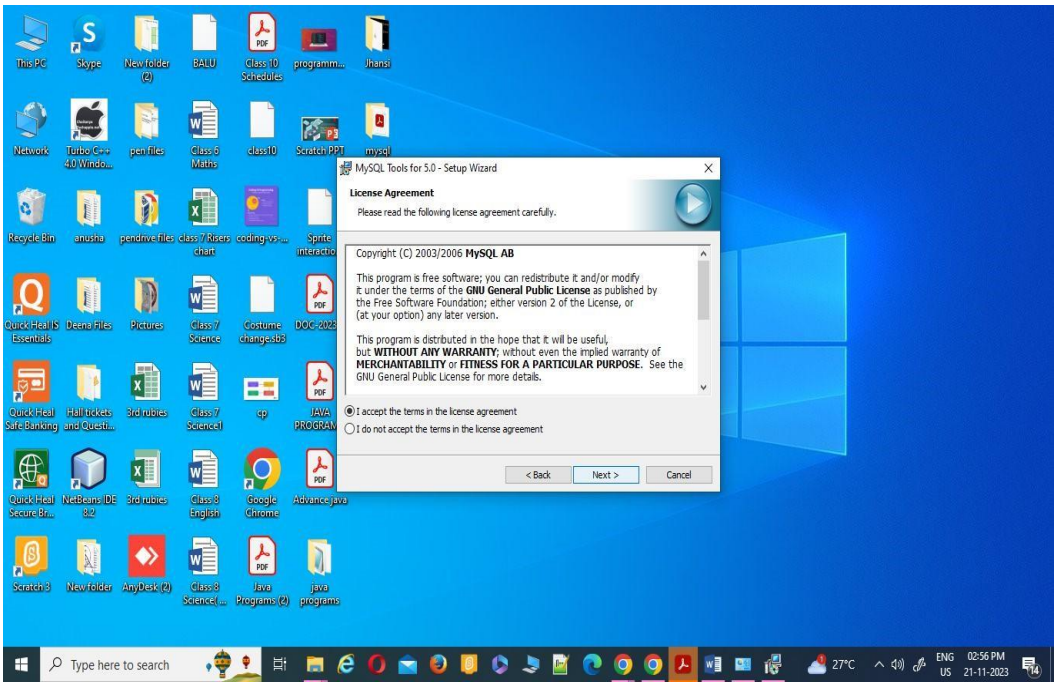
21-11-2023


MySQL Tools for 5.0 - Setup Wizard
License Agreement
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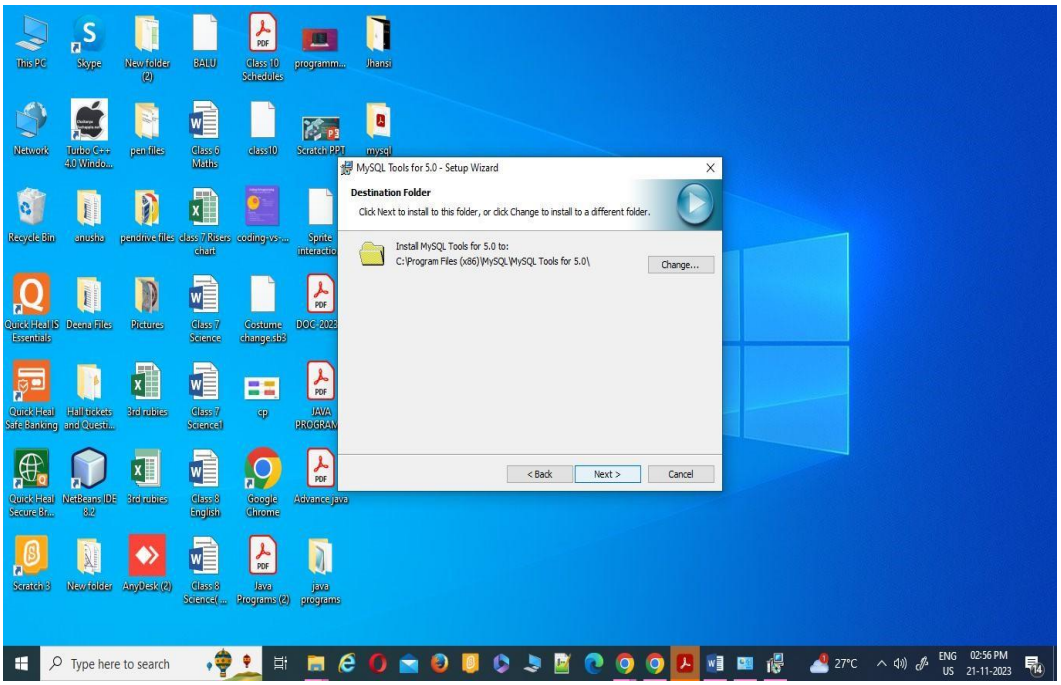
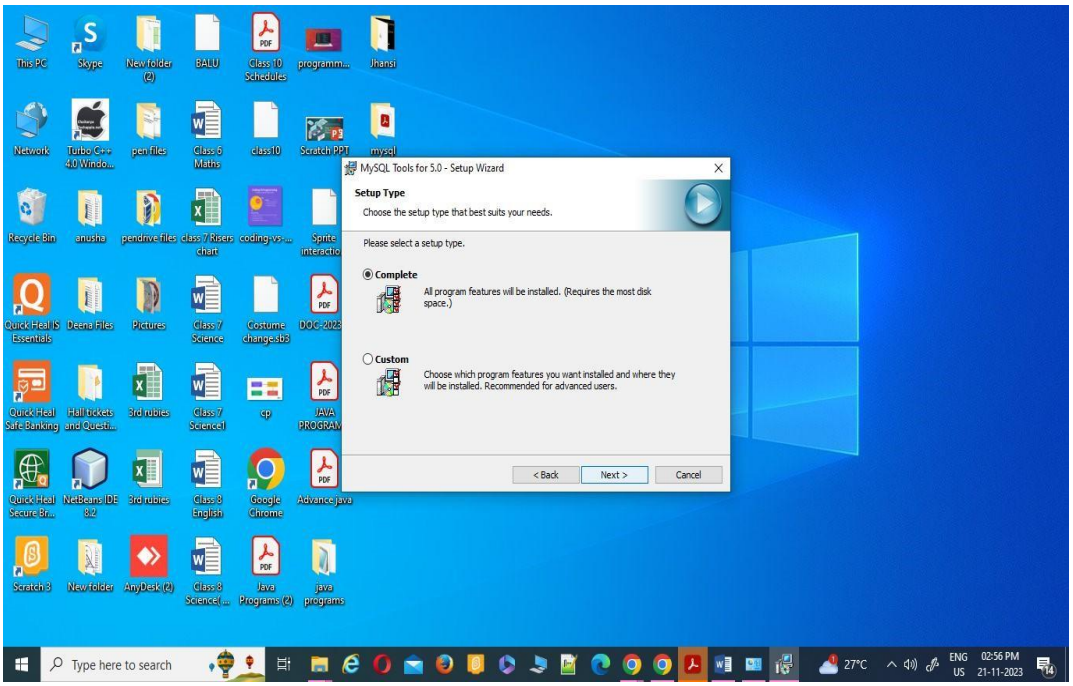
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
< Back
Next >
Cancel


MySQL Tools for 5.0 - Setup Wizard
Destination Folder
Click Next to install to this folder, or click Change to install to a different folder.
Install MySQL Tools for 5.0 to:
C:\Program Files (x86)\MySQL\MySQL Tools for 5.0\
Change...
< Back
Next >
Cancel


MySQL Tools for 5.0 - Setup Wizard
Setup Type
Choose the setup type that best suits your needs.
Please select a setup type.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
< Back
Next >
Cancel
Type here to search
27°C
ENG US
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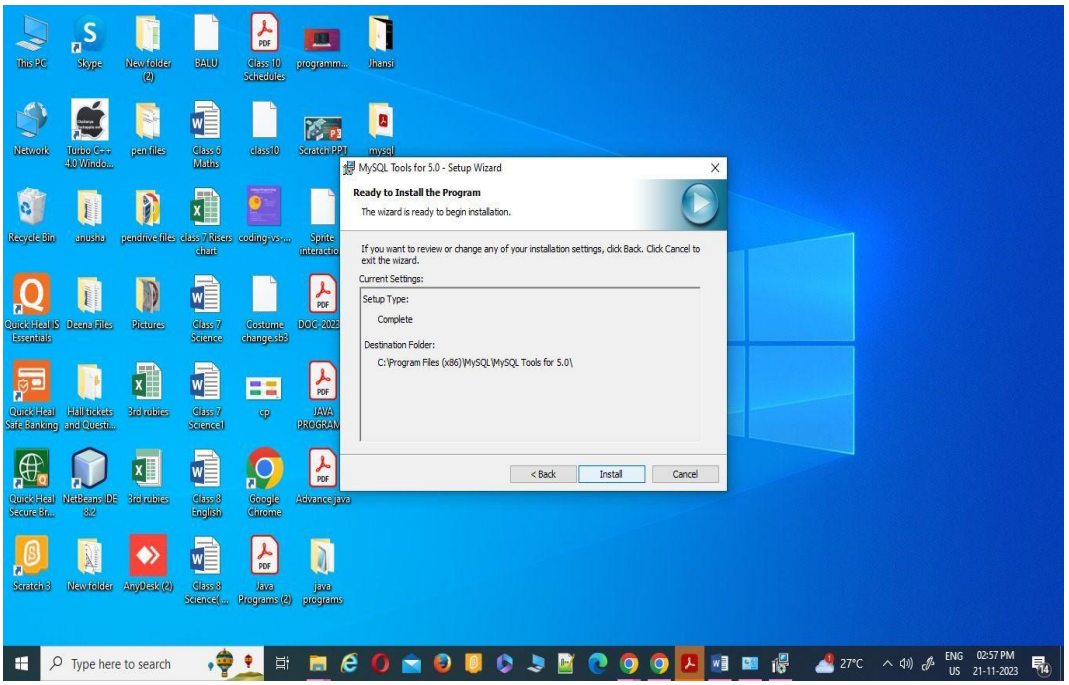
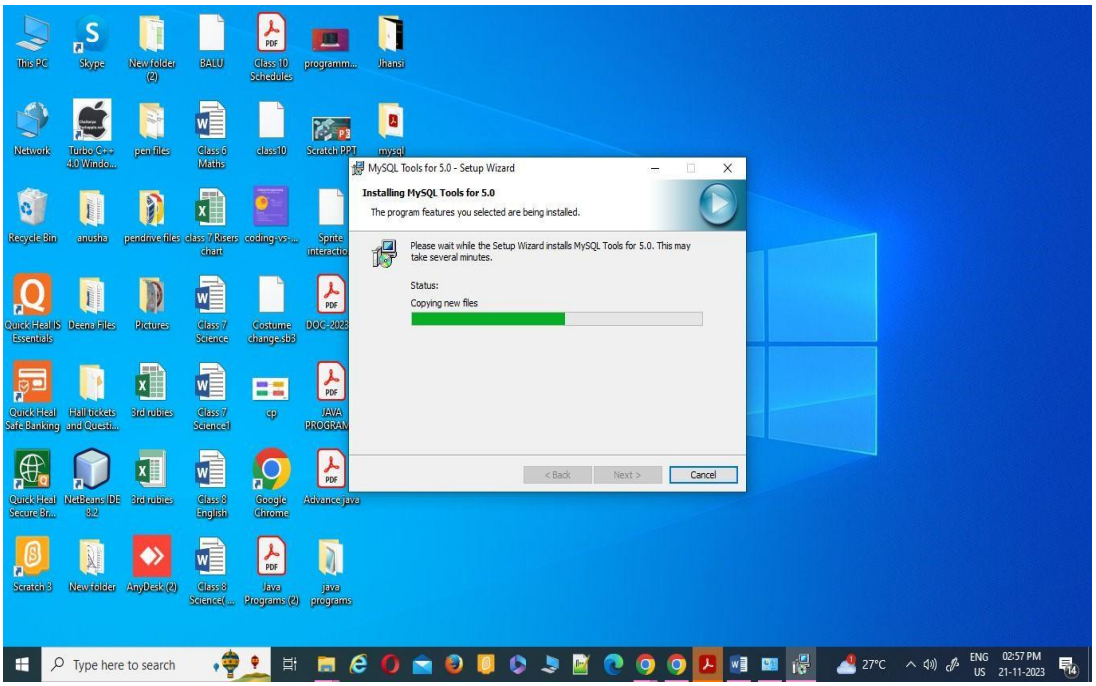
21-11-2023


MySQL Tools for 5.0 - Setup Wizard
Ready to Install the Program
The wizard is ready to begin installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Current Settings:
Setup Type:
Complete
Destination Folder:
C:\Program Files (x86)\MySQL\MySQL Tools for 5.0\
< Back
Install
Cancel
Type here to search
27°C
ENG US
02:57 PM
21-11-2023


MySQL Tools for 5.0 - Setup Wizard
Installing MySQL Tools for 5.0
The program features you selected are being installed.
Please wait while the Setup Wizard installs MySQL Tools for 5.0. This may take several minutes.
Status:
Copying new files
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Next >
Cancel
Type here to search
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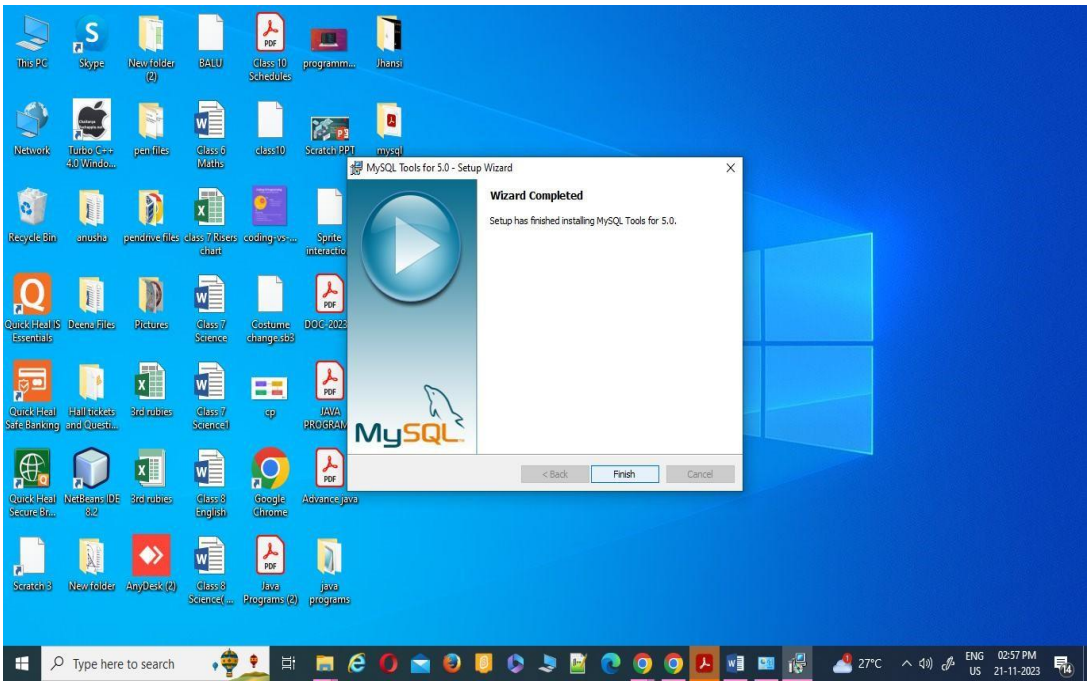
21-11-2023


MySQL Tools for 5.0 - Setup Wizard
Wizard Completed
Setup has finished installing MySQL Tools for 5.0.
MySQL
< Back
Finish
Cancel
Type here to search
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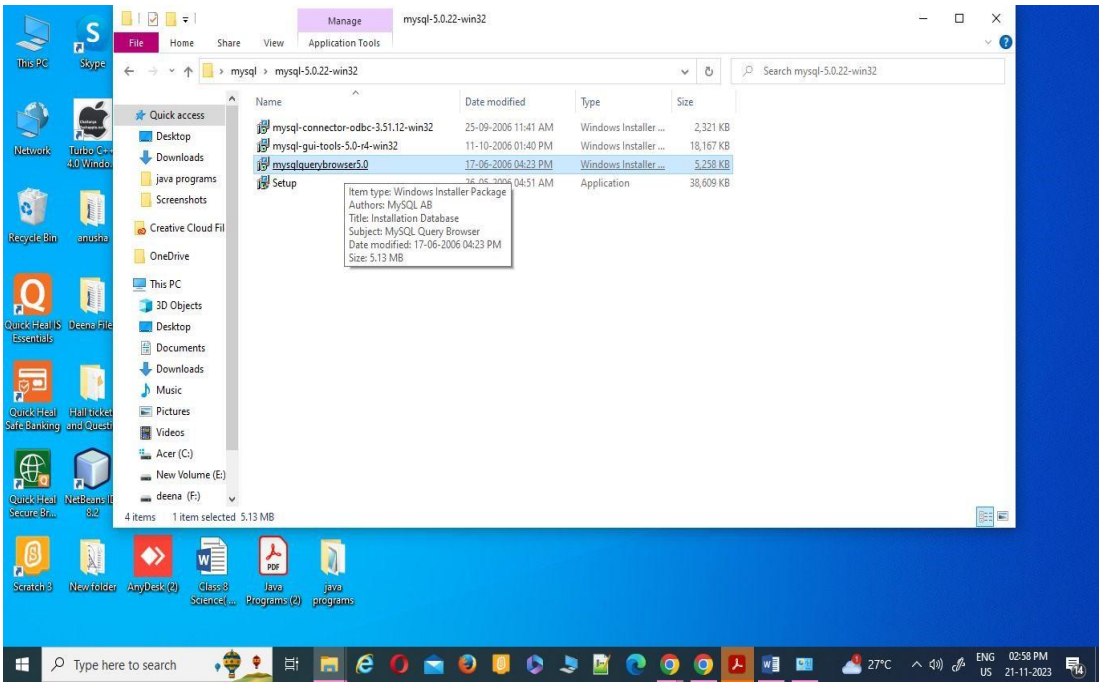
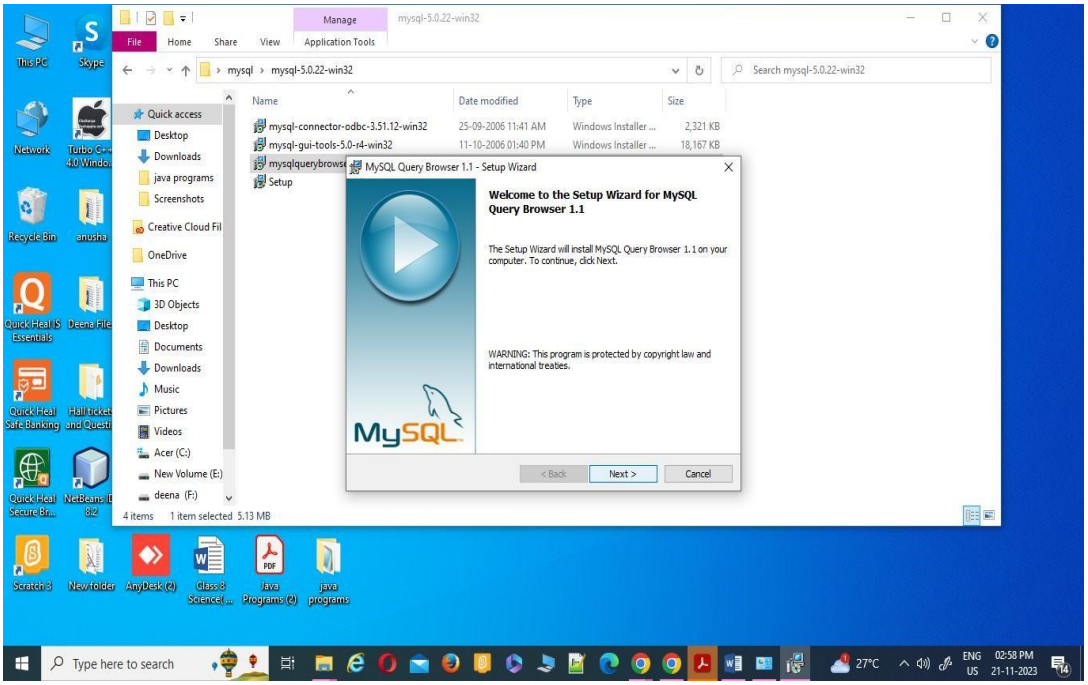
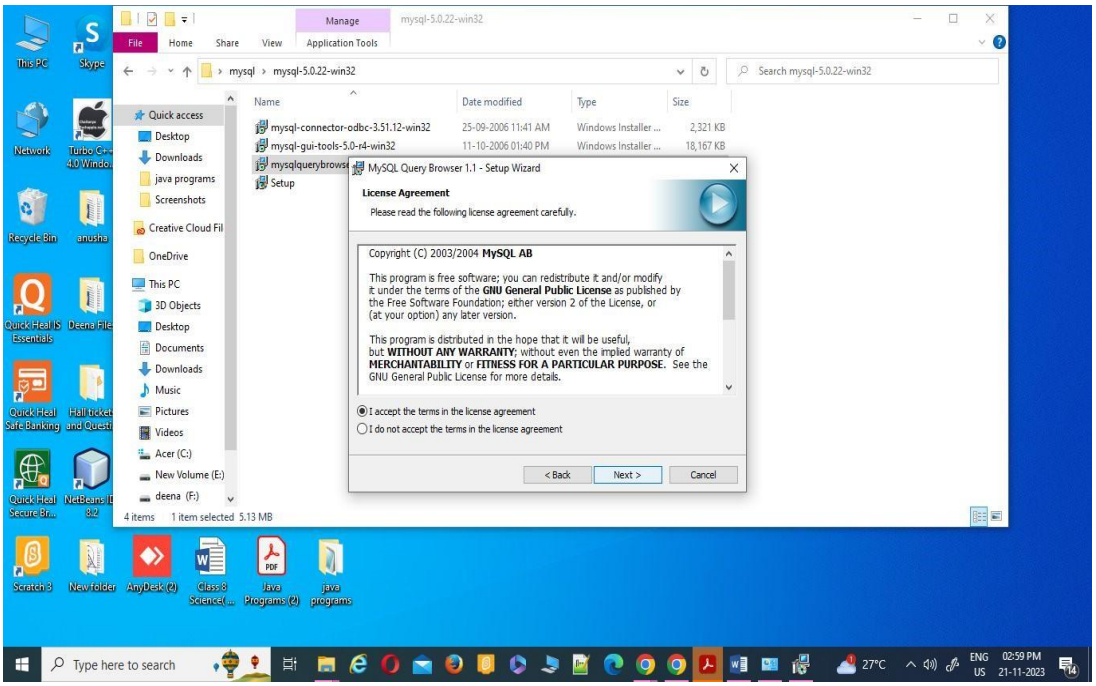
21-11-2023

Mysql query browser






mysql-5.0.22-win32
Manage
File Home Share View Application Tools
mysql › mysql-5.0.22-win32
Search mysql-5.0.22-win32
Quick access
Desktop
Downloads
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Creative Cloud Fil
OneDrive
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3D Objects
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Documents
Downloads
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Pictures
Videos
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New Volume (E:)
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Type
Size
mysql-connector-odbc-3.51.12-win32
25-09-2006 11:41 AM
Windows Installer ...
2,321 KB
mysql-gui-tools-5.0-r4-win32
11-10-2006 01:40 PM
Windows Installer ...
18,167 KB
Setup
4 items
1 item selected 5.13 MB
MySQL Query Browser 1.1 - Setup Wizard
License Agreement
Please read the following license agreement carefully.
Copyright (C) 2003/2004 MySQL AB
This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.
This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.
I accept the terms in the license agreement
I do not accept the terms in the license agreement
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Next >
Cancel
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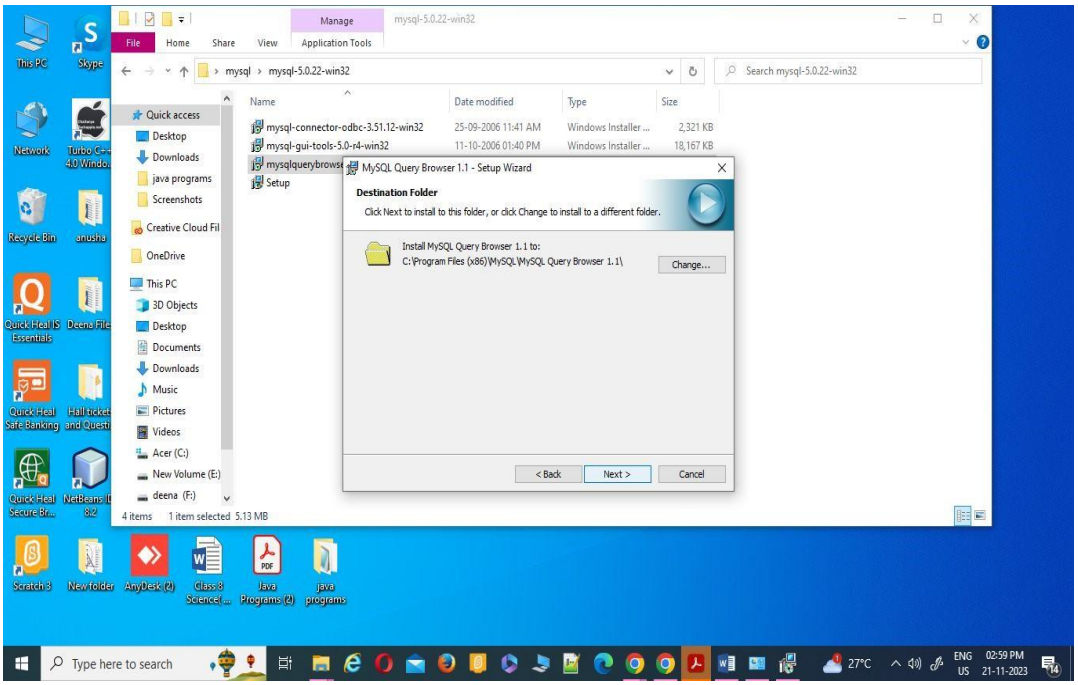
21-11-2023


mysql-5.0.22-win32
Manage
File Home Share View Application Tools
mysql › mysql-5.0.22-win32
Search mysql-5.0.22-win32
Quick access
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25-09-2006 11:41 AM
Windows Installer ...
2,321 KB
mysql-gui-tools-5.0-r4-win32
11-10-2006 01:40 PM
Windows Installer ...
18,167 KB
Setup
4 items
1 item selected 5.13 MB
MySQL Query Browser 1.1 - Setup Wizard
Destination Folder
Click Next to install to this folder, or click Change to install to a different folder.
Install MySQL Query Browser 1.1 to:
C:\Program Files (x86)\MySQL\MySQL Query Browser 1.1\
Change...
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Next >
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Type here to search
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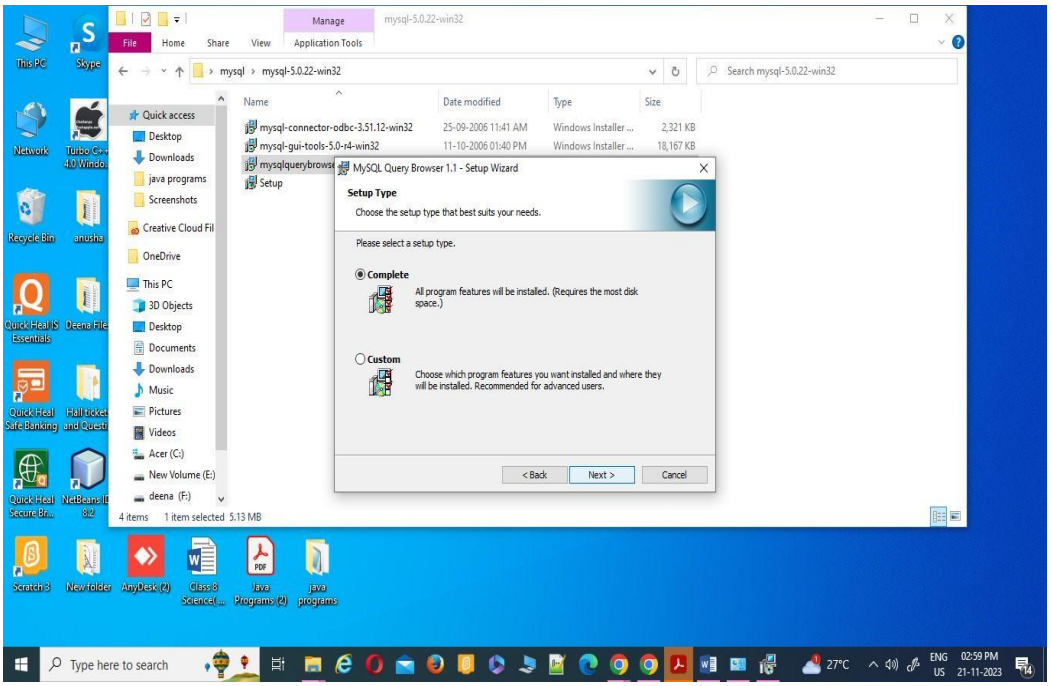
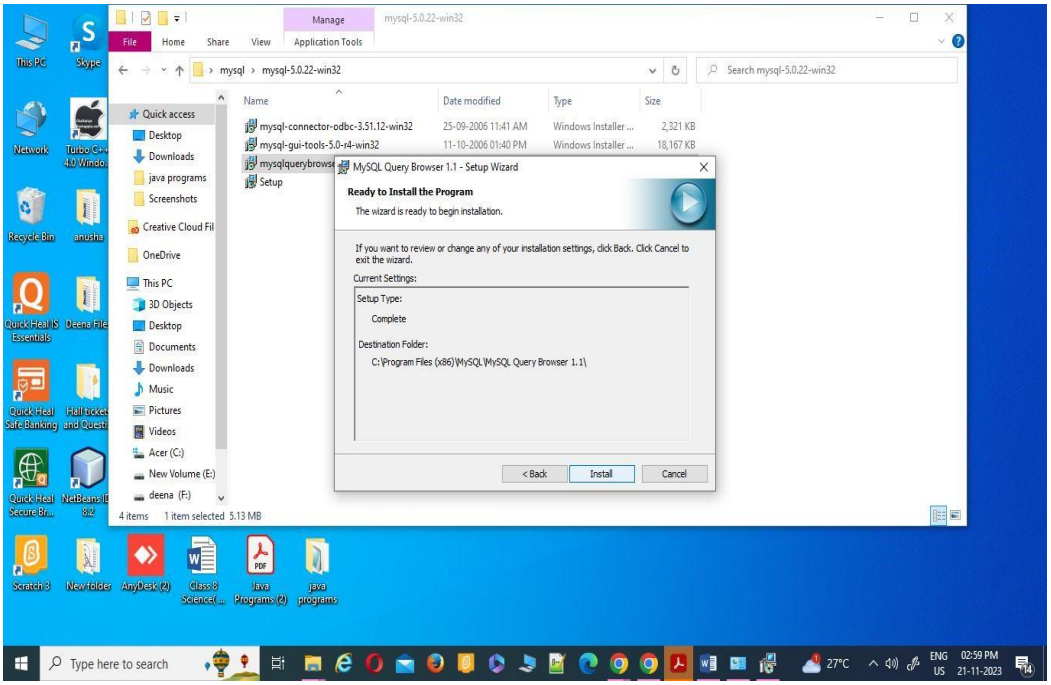
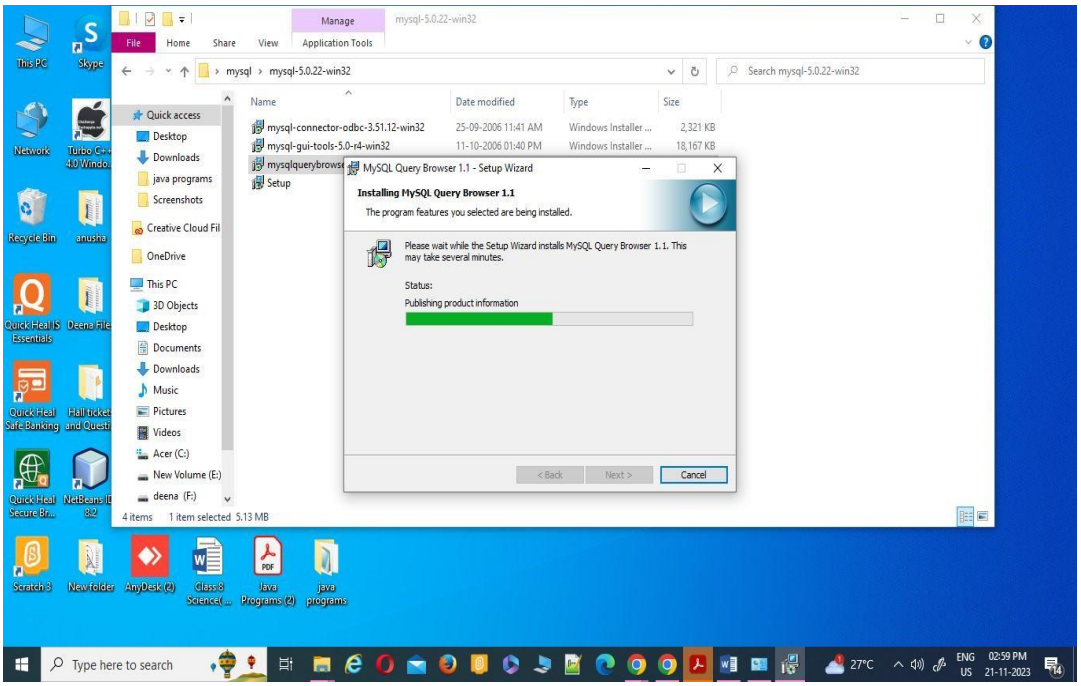
21-11-2023


MySQL Query Browser 1.1 - Setup Wizard
Setup Type
Choose the setup type that best suits your needs.
Please select a setup type.
Complete
All program features will be installed. (Requires the most disk space.)
Custom
Choose which program features you want installed and where they will be installed. Recommended for advanced users.
< Back
Next >
Cancel


MySQL Query Browser 1.1 - Setup Wizard
Ready to Install the Program
The wizard is ready to begin installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Current Settings:
Setup Type:
Complete
Destination Folder:
C:\Program Files (x86)\MySQL\MySQL Query Browser 1.1\
< Back
Install
Cancel


mysql-5.0.22-win32
Manage
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Application Tools
mysql › mysql-5.0.22-win32
Search mysql-5.0.22-win32
Quick access
Desktop
Downloads
java programs
Screenshots
Creative Cloud Fil
OneDrive
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3D Objects
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Downloads
Music
Pictures
Videos
Acer (C:)
New Volume (E:)
deena (F:)
Name
Date modified
Type
Size
mysql-connector-odbc-3.51.12-win32
25-09-2006 11:41 AM
Windows Installer ...
2,321 KB
mysql-gui-tools-5.0-r4-win32
11-10-2006 01:40 PM
Windows Installer ...
18,167 KB
Setup
MySQL Query Browser 1.1 - Setup Wizard
Installing MySQL Query Browser 1.1
The program features you selected are being installed.
Please wait while the Setup Wizard installs MySQL Query Browser 1.1. This may take several minutes.
Status:
Publishing product information
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1 item selected 5.13 MB
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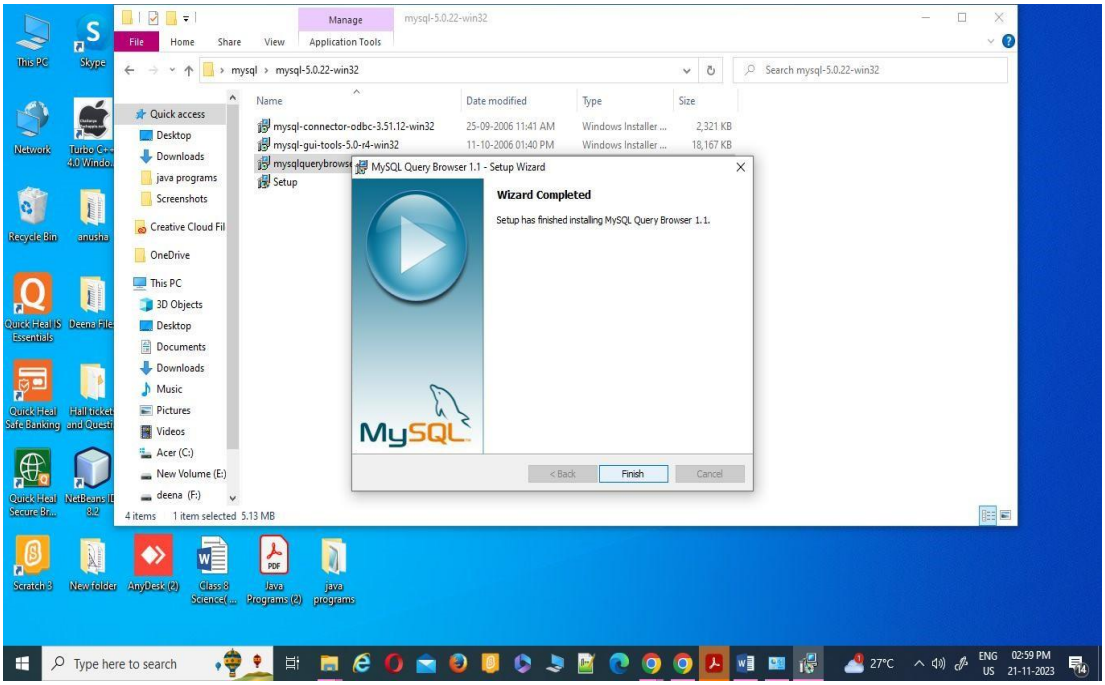
21-11-2023


mysql-5.0.22-win32
Manage
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Application Tools
mysql › mysql-5.0.22-win32
Search mysql-5.0.22-win32
Quick access
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Downloads
java programs
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Videos
Acer (C:)
New Volume (E:)
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mysql-connector-odbc-3.51.12-win32
25-09-2006 11:41 AM
Windows Installer ...
2,321 KB
mysql-gui-tools-5.0-r4-win32
11-10-2006 01:40 PM
Windows Installer ...
18,167 KB
Setup
MySQL Query Browser 1.1 - Setup Wizard
Wizard Completed
Setup has finished installing MySQL Query Browser 1.1.
MySQL
< Back
Finish
Cancel
4 items
1 item selected 5.13 MB
Type here to search
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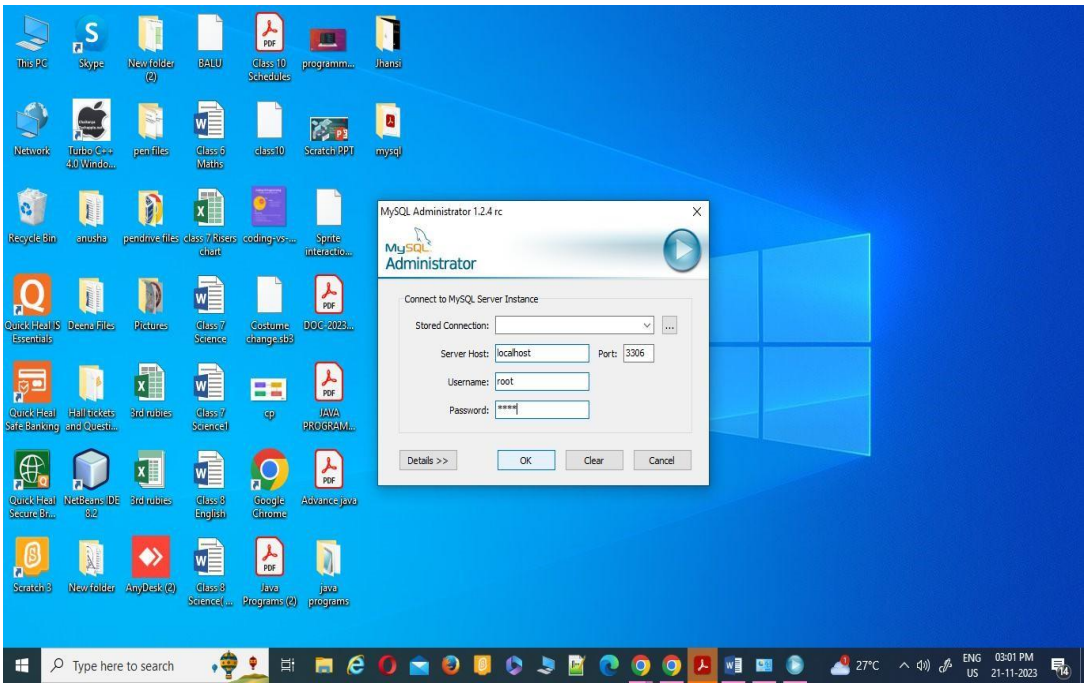
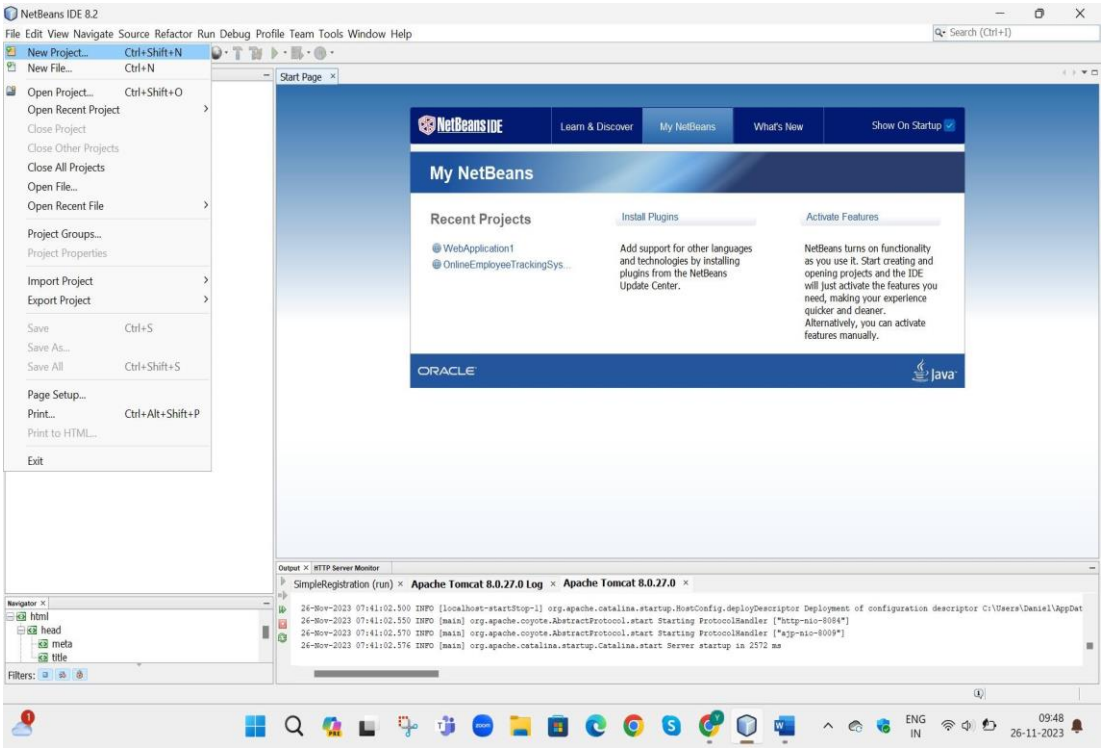
02:59 PM
21-11-2023

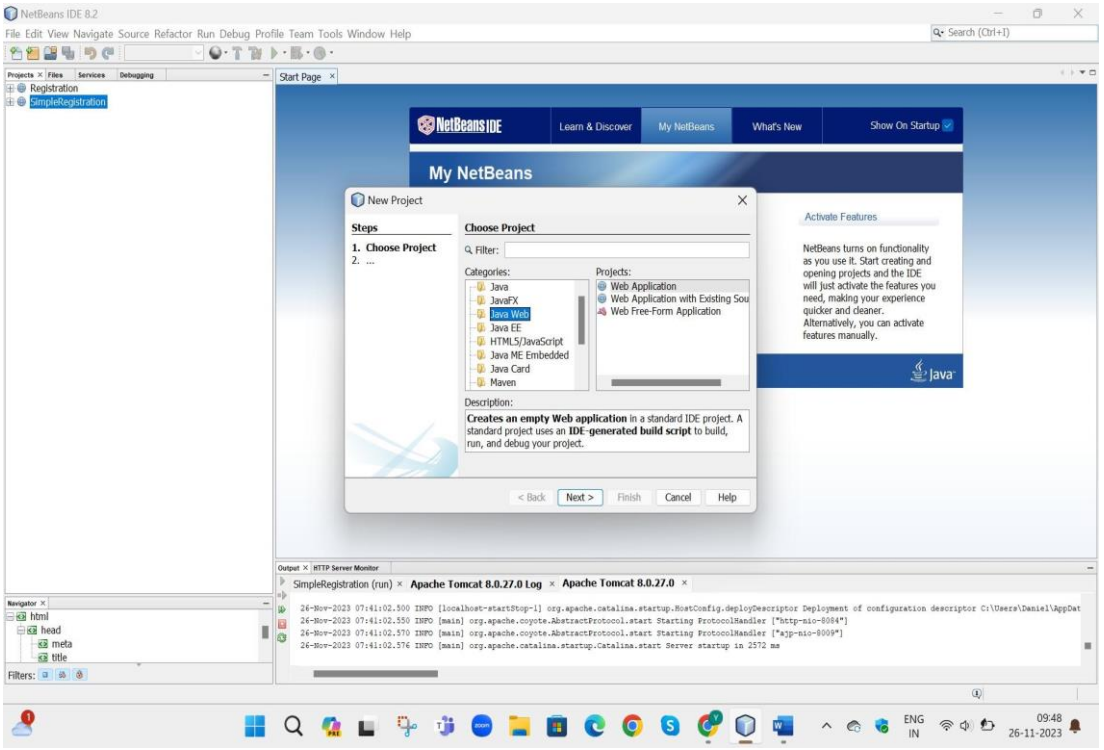
Open MYSQL administrator

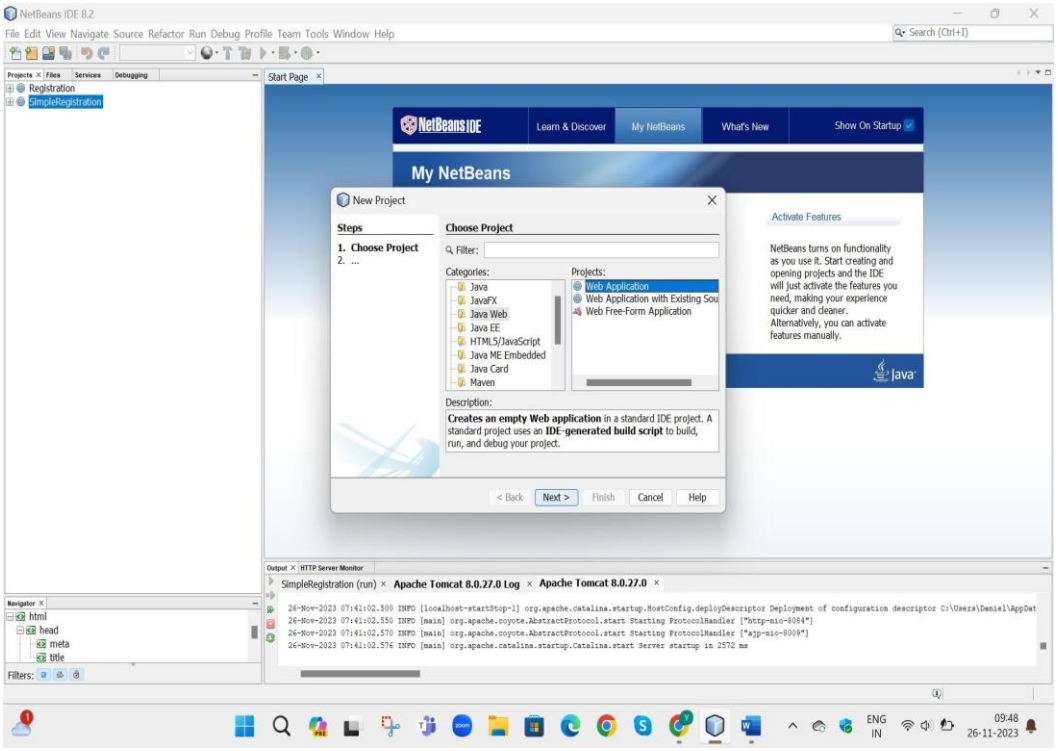


NetBeans Project Creation:

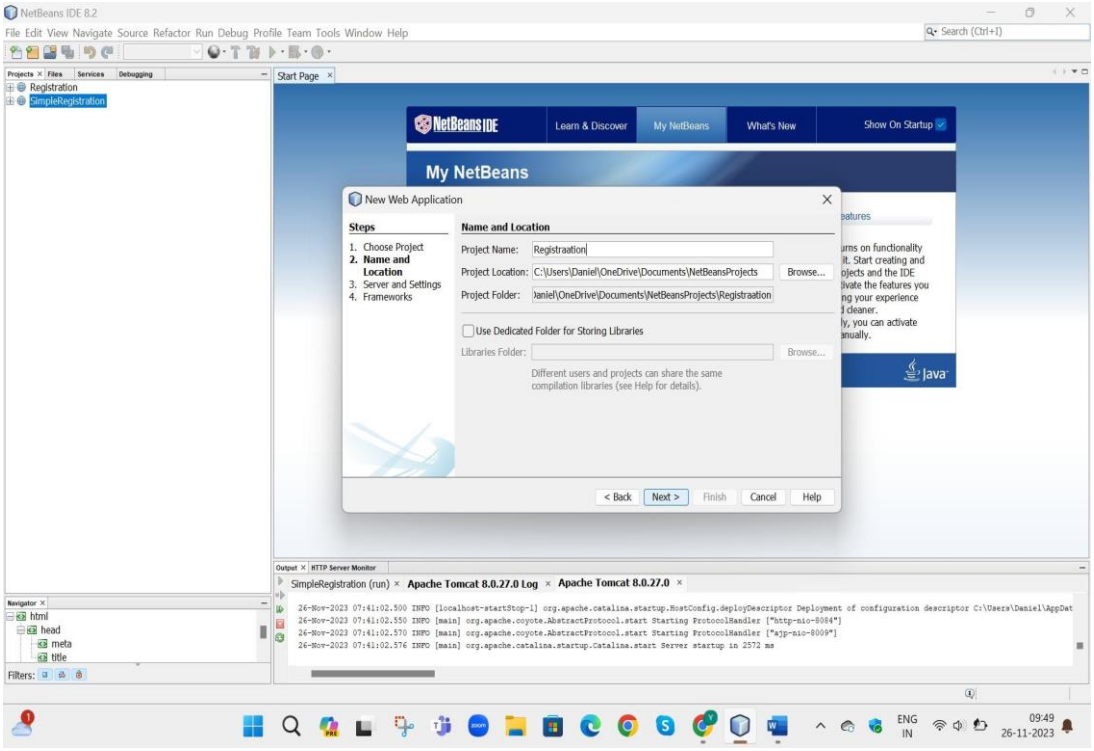
Creating a New Project:

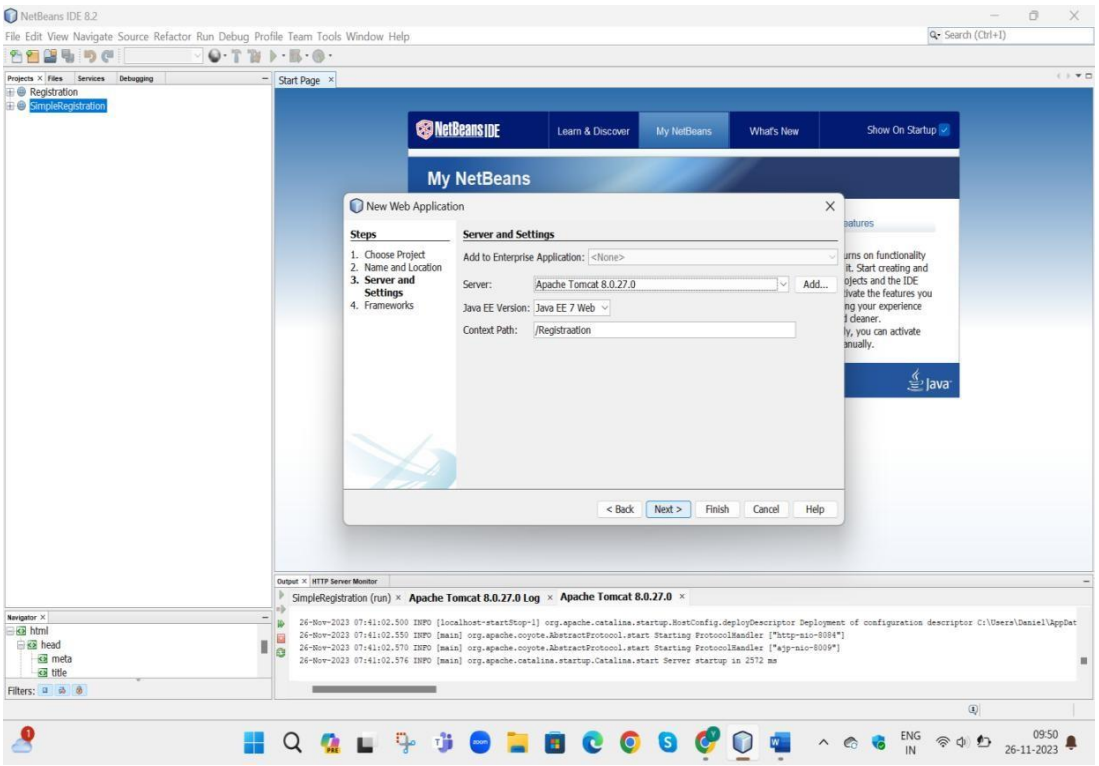


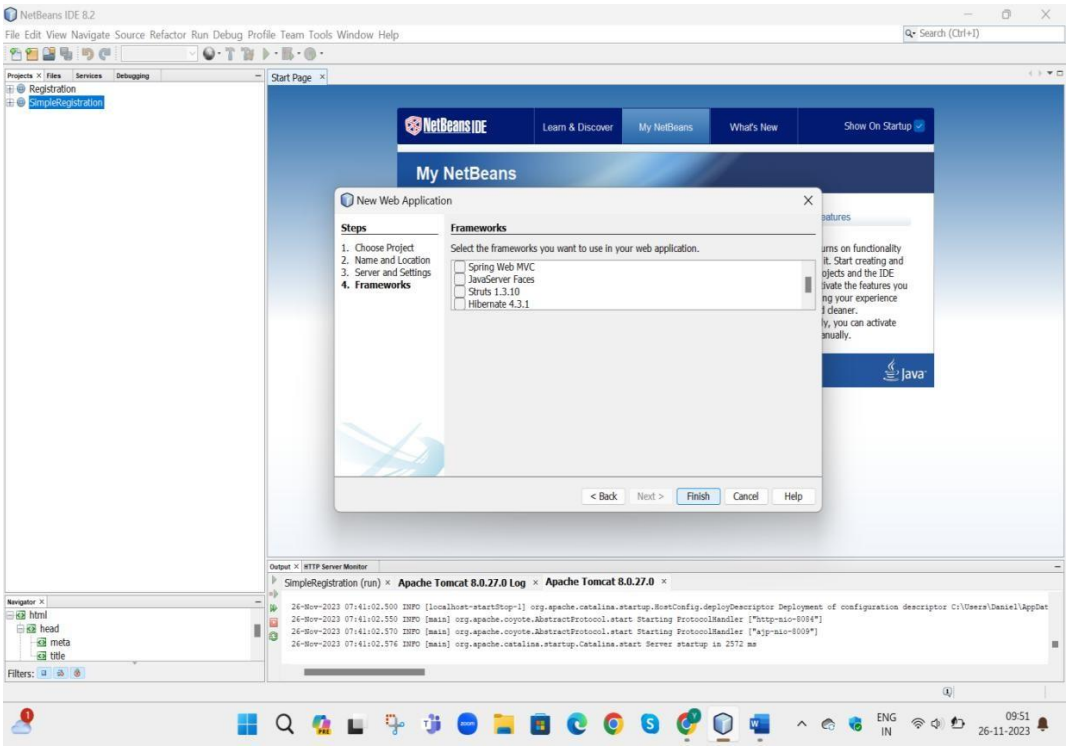


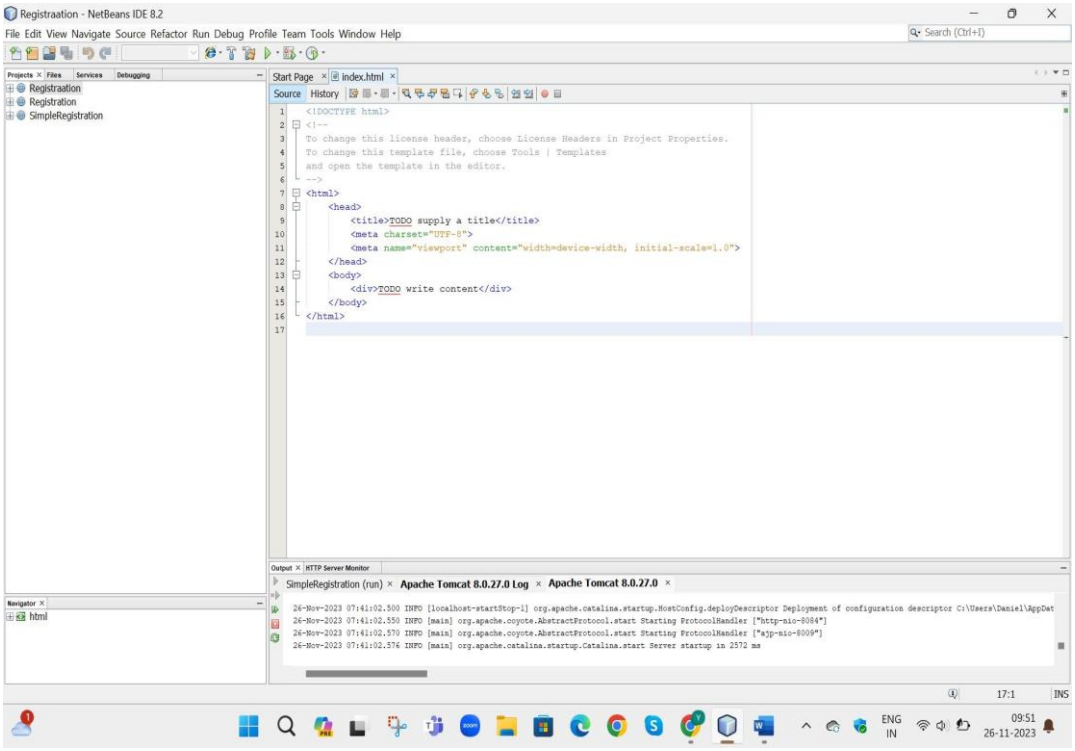


Give a name to your Project (Project name): Registration (Give your Respective Project Name)



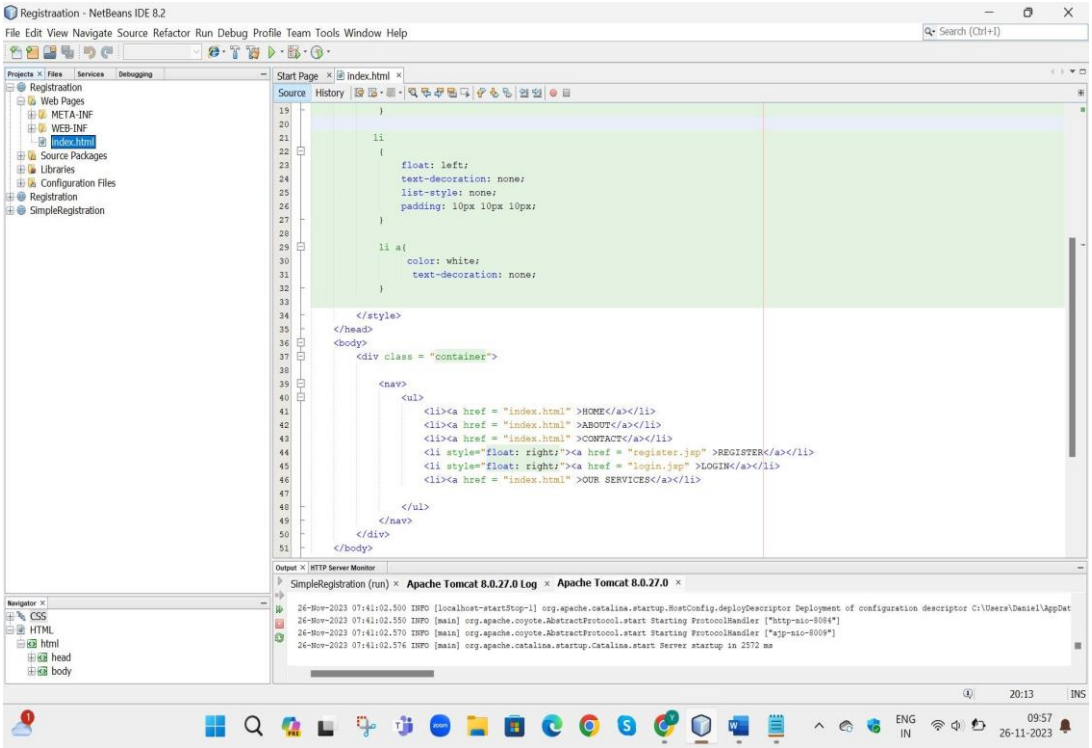

NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Registration
SimpleRegistration
Start Page
NetBeans IDE
Learn & Discover
My NetBeans
What's New
Show On Startup
My NetBeans
New Web Application
Steps
1. Choose Project
2. Name and Location
3. Server and Settings
4. Frameworks
Server and Settings
Add to Enterprise Application: <None>
Server: Apache Tomcat 8.0.27.0
Add...
Java EE Version: Java EE 7 Web
Context Path: /Registraation
< Back
Next >
Finish
Cancel
Help
SimpleRegistration (run)
Apache Tomcat 8.0.27.0 Log
Apache Tomcat 8.0.27.0
26-Nov-2023 07:41:02.500 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDescriptor Deployment of configuration descriptor C:\Users\Daniel\AppDat
26-Nov-2023 07:41:02.550 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-nio-8084"]
26-Nov-2023 07:41:02.570 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["ajp-nio-8009"]
26-Nov-2023 07:41:02.576 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in 2572 ms
Navigator
html
head
meta
title
Filters:
ENG
IN
09:50
26-11-2023


NetBeans IDE 8.2
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Registration
SimpleRegistration
Start Page
NetBeans IDE
Learn & Discover
My NetBeans
What's New
Show On Startup
My NetBeans
New Web Application
Steps
1. Choose Project
2. Name and Location
3. Server and Settings
4. Frameworks
Frameworks
Select the frameworks you want to use in your web application.
Spring Web MVC
JavaServer Faces
Struts 1.3.10
Hibernate 4.3.1
< Back
Next >
Finish
Cancel
Help
SimpleRegistration (run)
Apache Tomcat 8.0.27.0 Log
Apache Tomcat 8.0.27.0
26-Nov-2023 07:41:02.500 INFO [localhost-startStop-1] org.apache.catalina.startup.HostConfig.deployDescriptor Deployment of configuration descriptor C:\Users\Daniel\AppDat
26-Nov-2023 07:41:02.550 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["http-nio-8084"]
26-Nov-2023 07:41:02.570 INFO [main] org.apache.coyote.AbstractProtocol.start Starting ProtocolHandler ["ajp-nio-8009"]
26-Nov-2023 07:41:02.576 INFO [main] org.apache.catalina.startup.Catalina.start Server startup in 2572 ms
Navigator
html
head
meta
title
Filters:
ENG
IN
09:51
26-11-2023



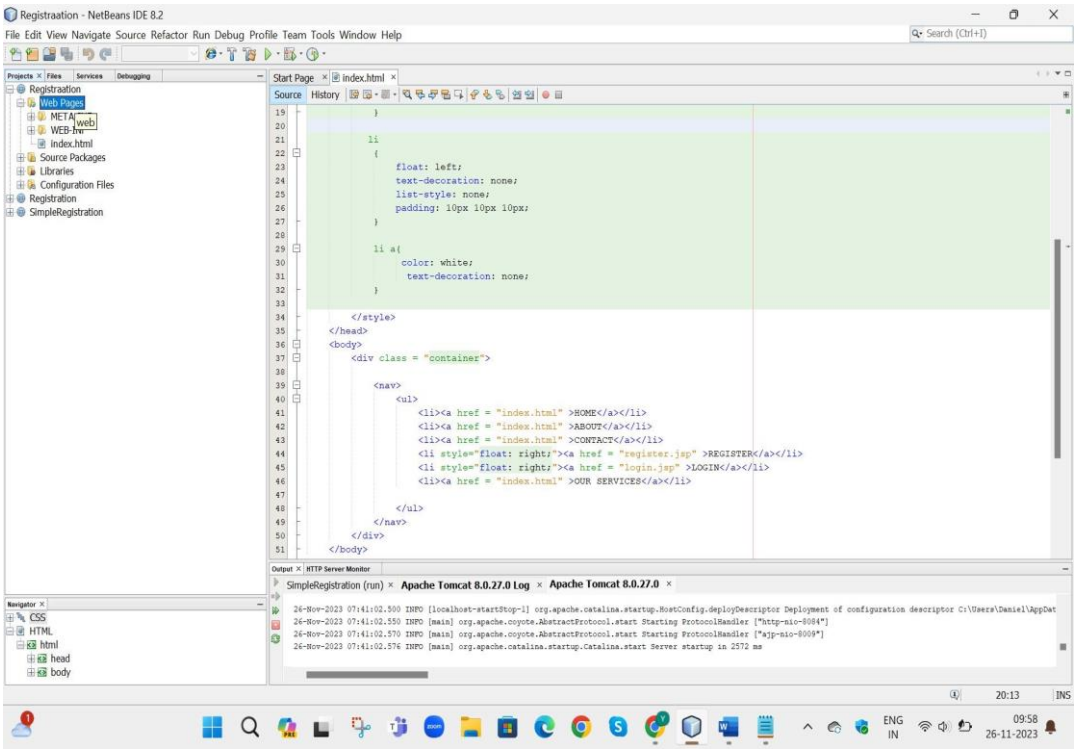
Remove the default code and enter the code shared with you as shown below:

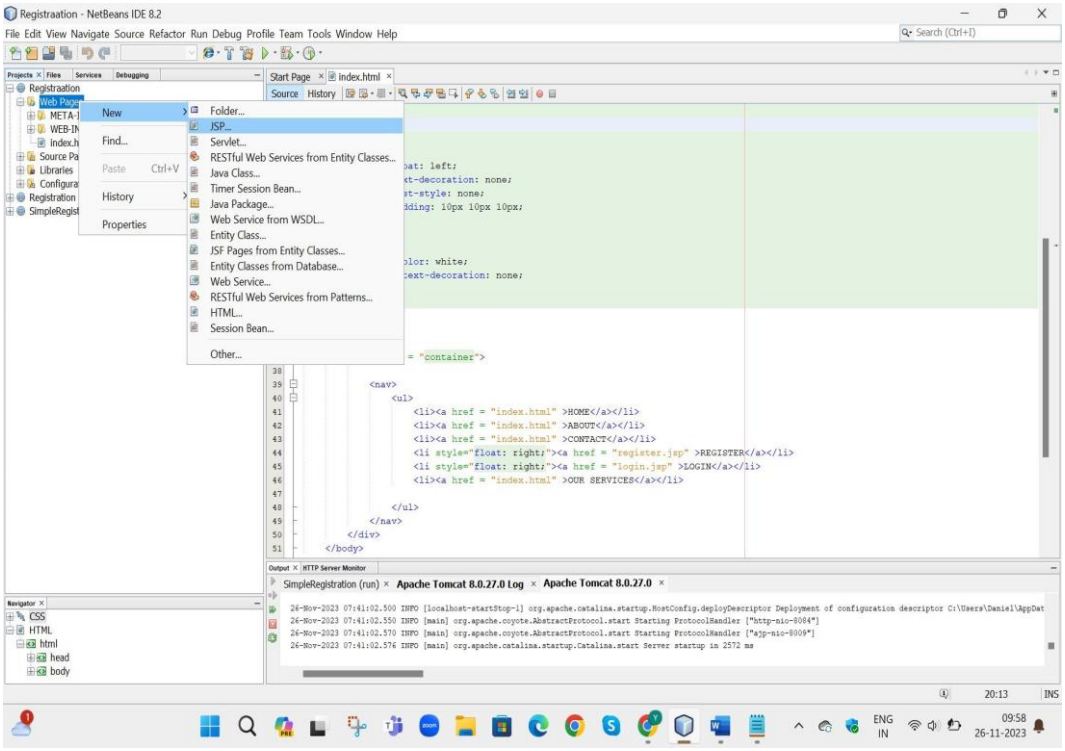
index.html

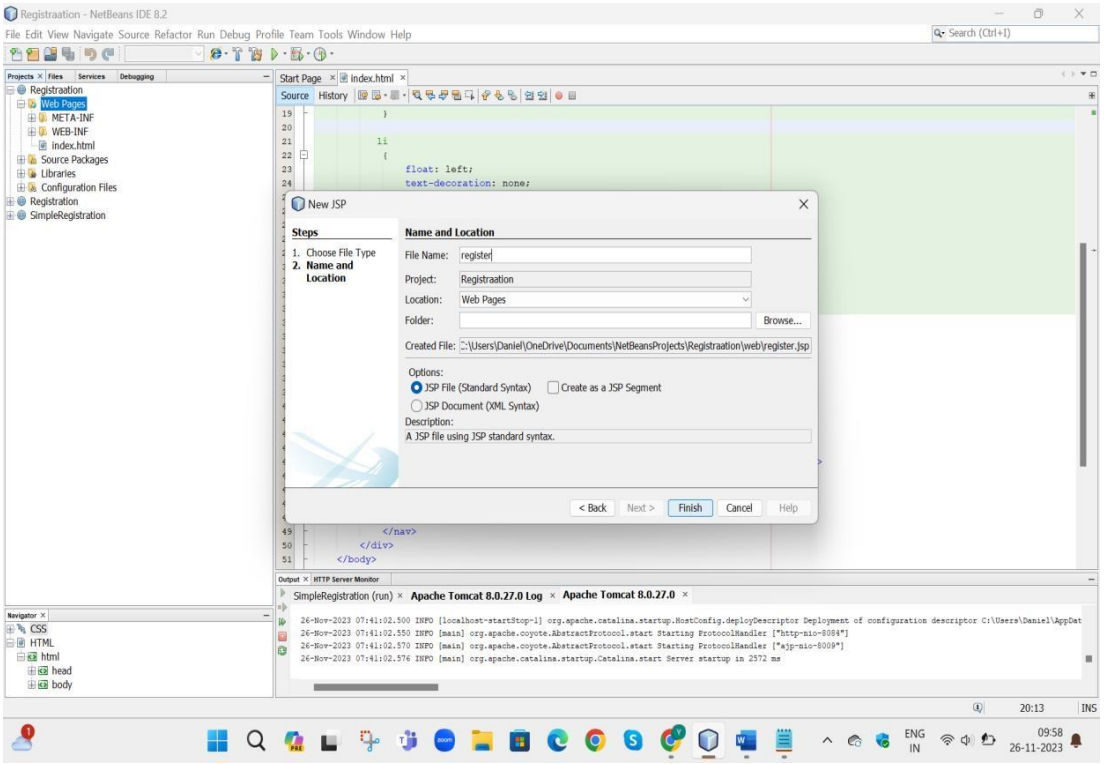


Creating jsp pages:

Right click on Web Pages -> New -> JSP as shown below

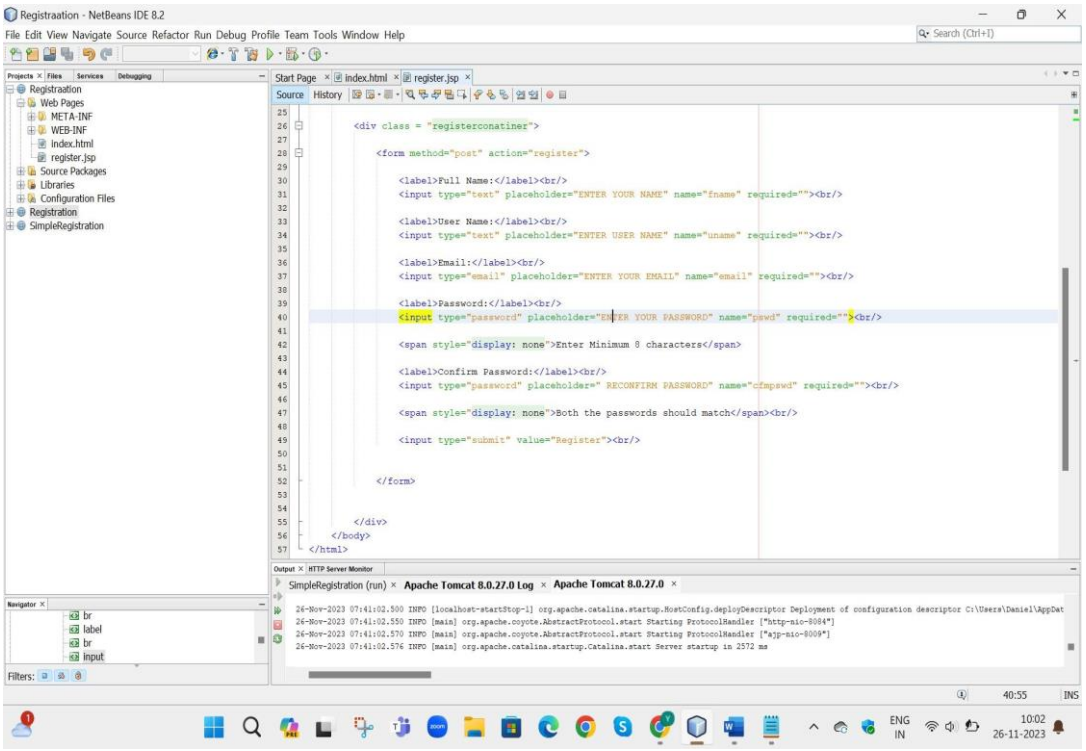




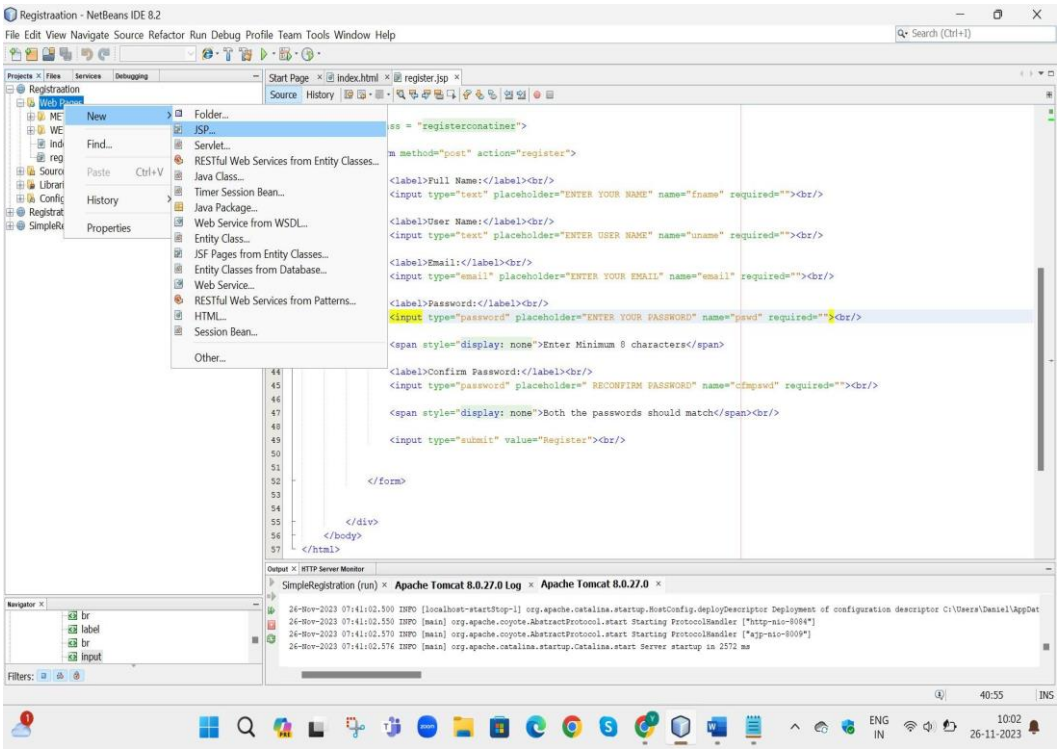


enter filename as “**register**” and hit **Finish** button.

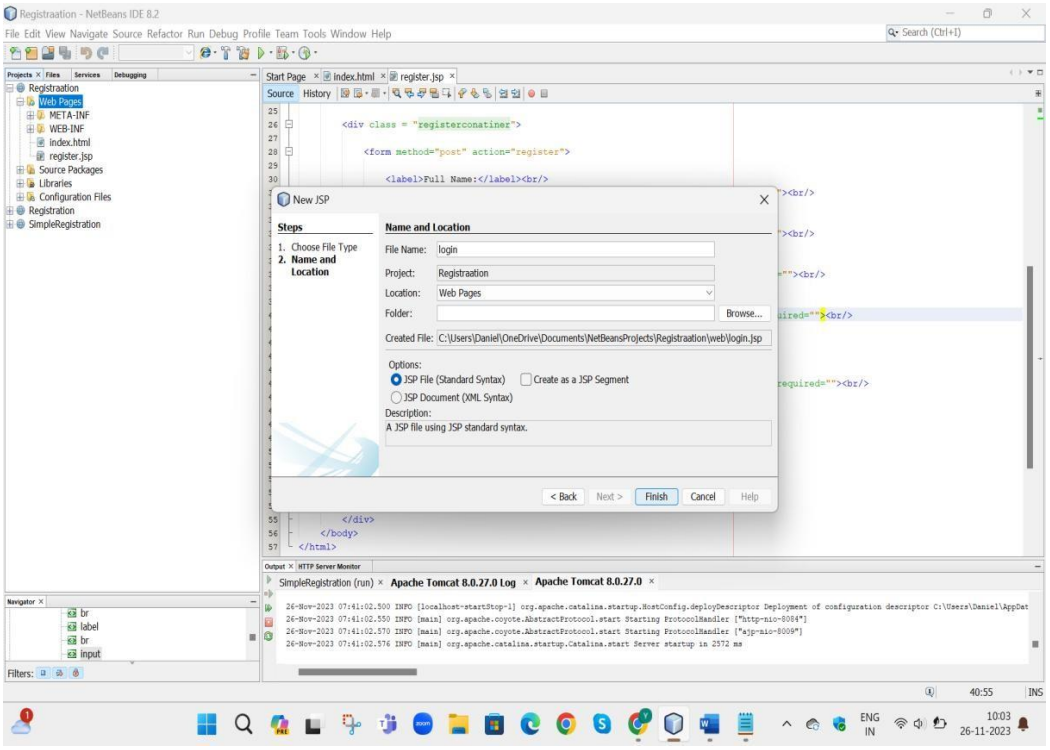
Remove the default code and enter the code shared with you given in word document for “**register.jsp**” as shown below:



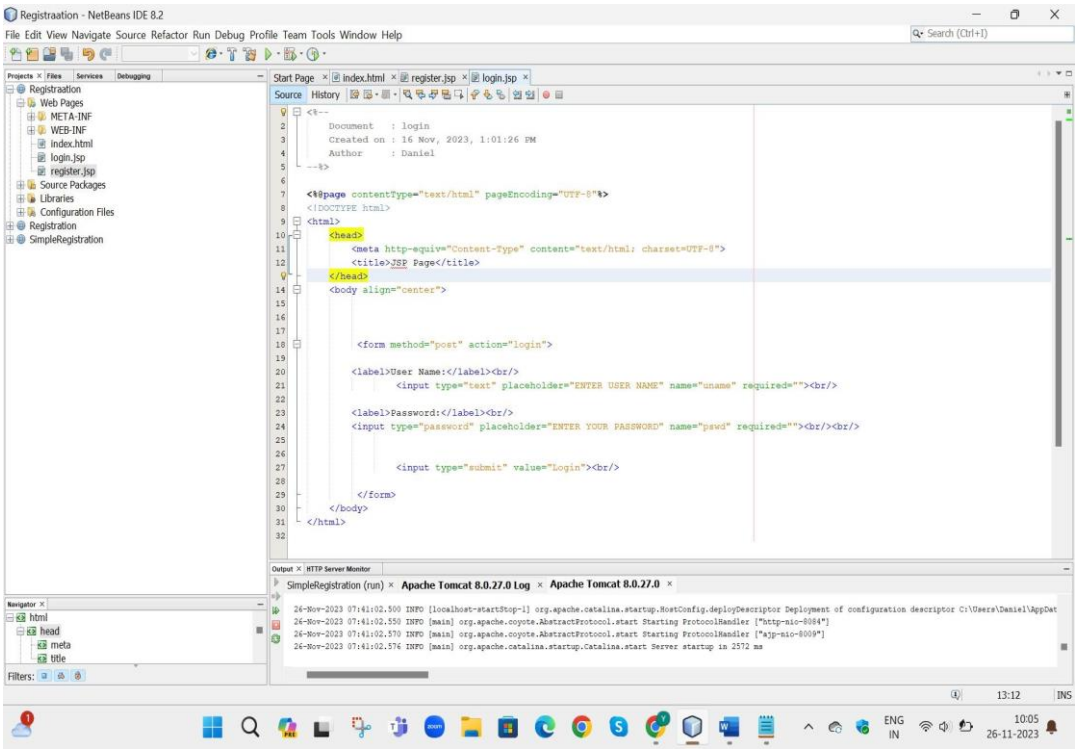
Again, create another file with name “**login.jsp**” as shown below:



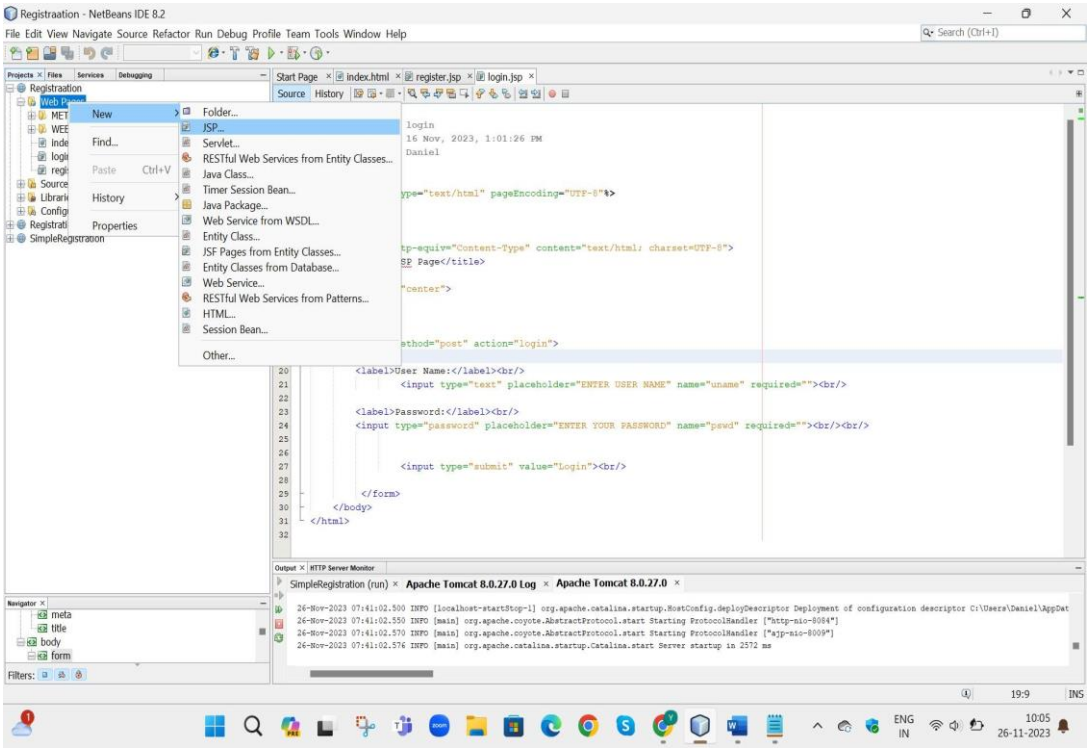
With file name as “**login.jsp”** as shown below:

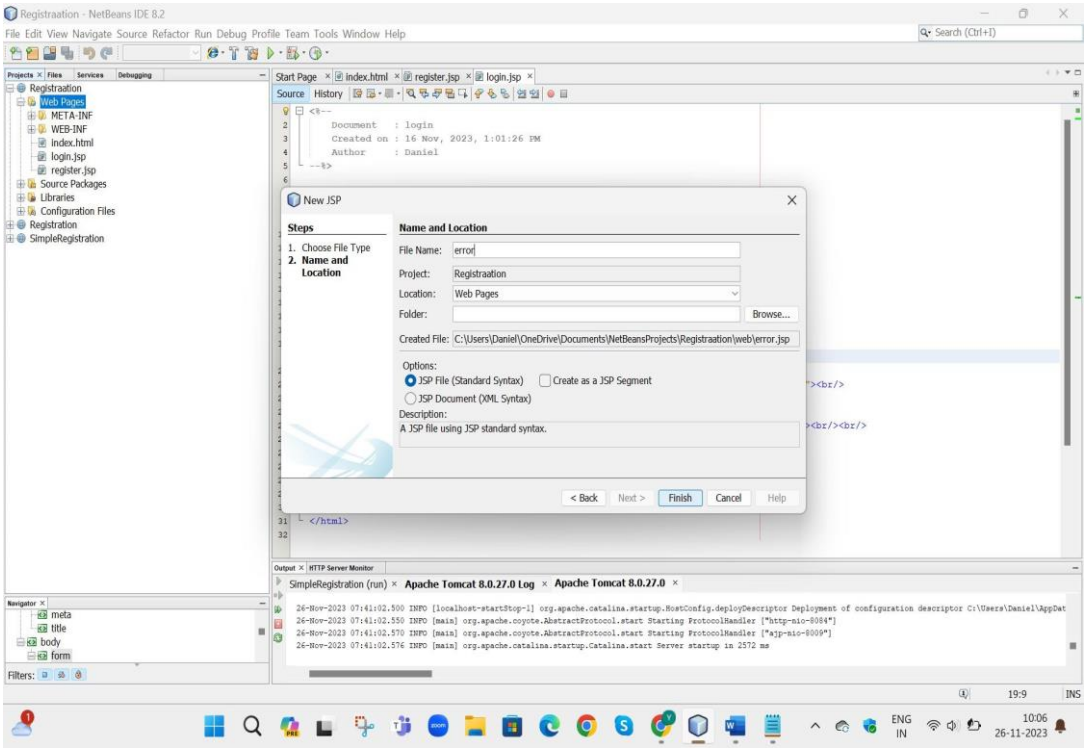


Hit **Finish** button and enter the code for it as shown below:

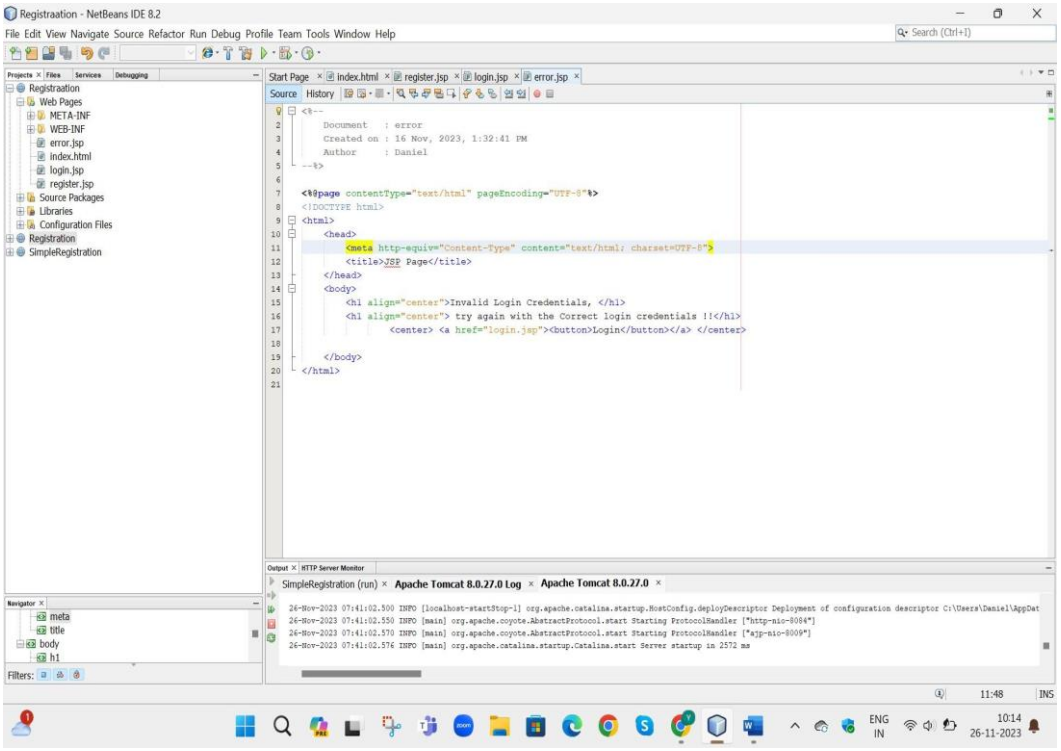


Again, with file name as "**error.jsp**" as shown below:

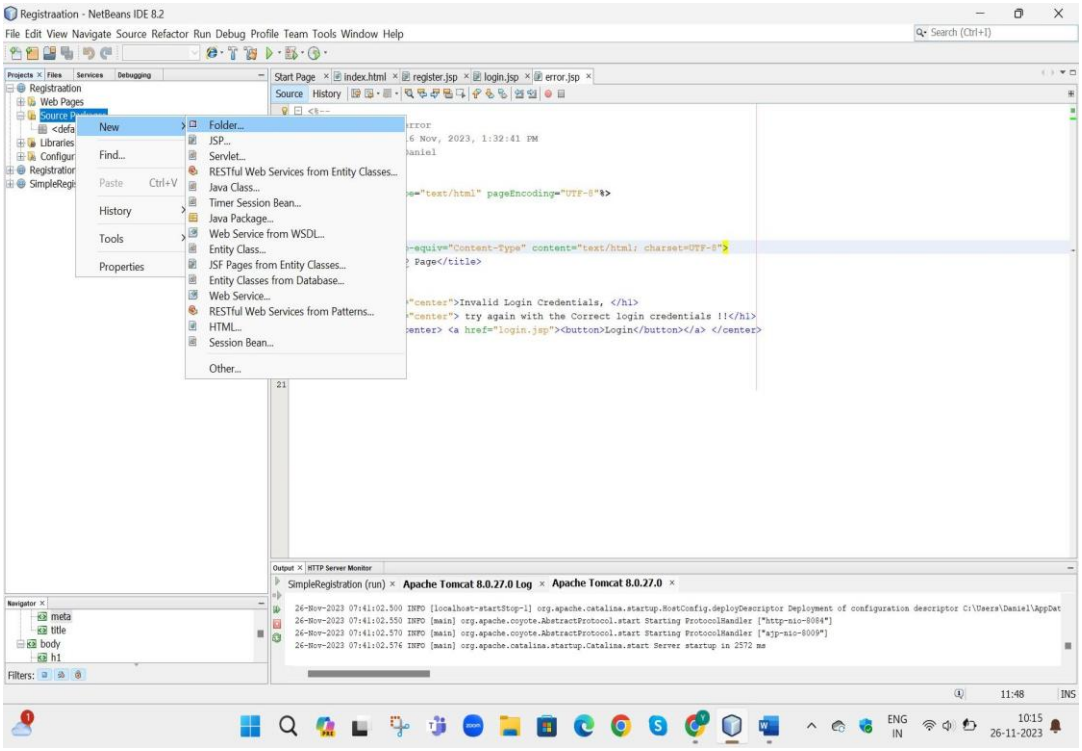




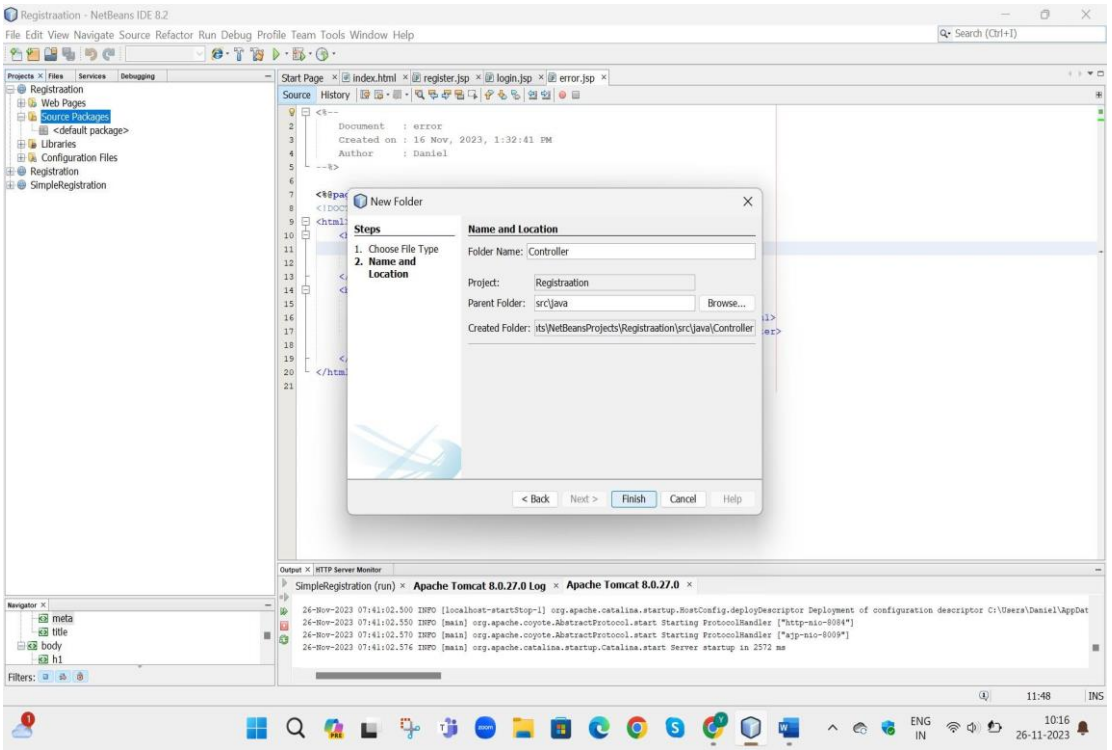
Hit **Finish** button and enter the code as shown below:



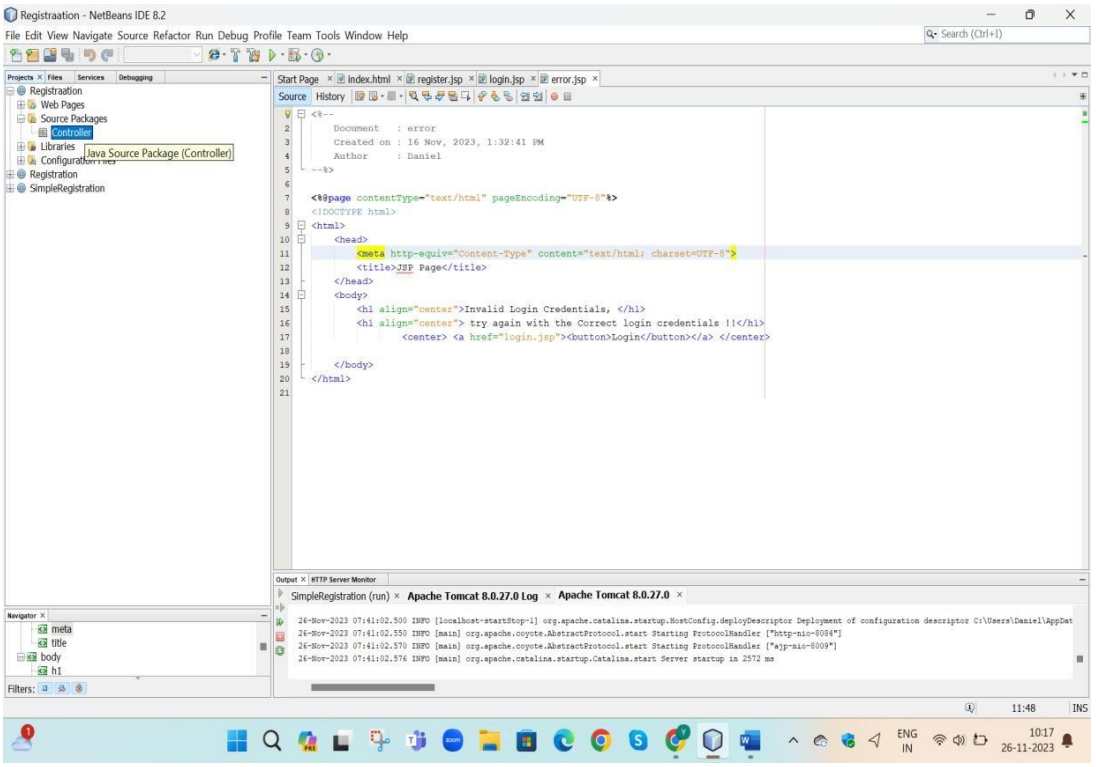
Creating .java files(Servlets)



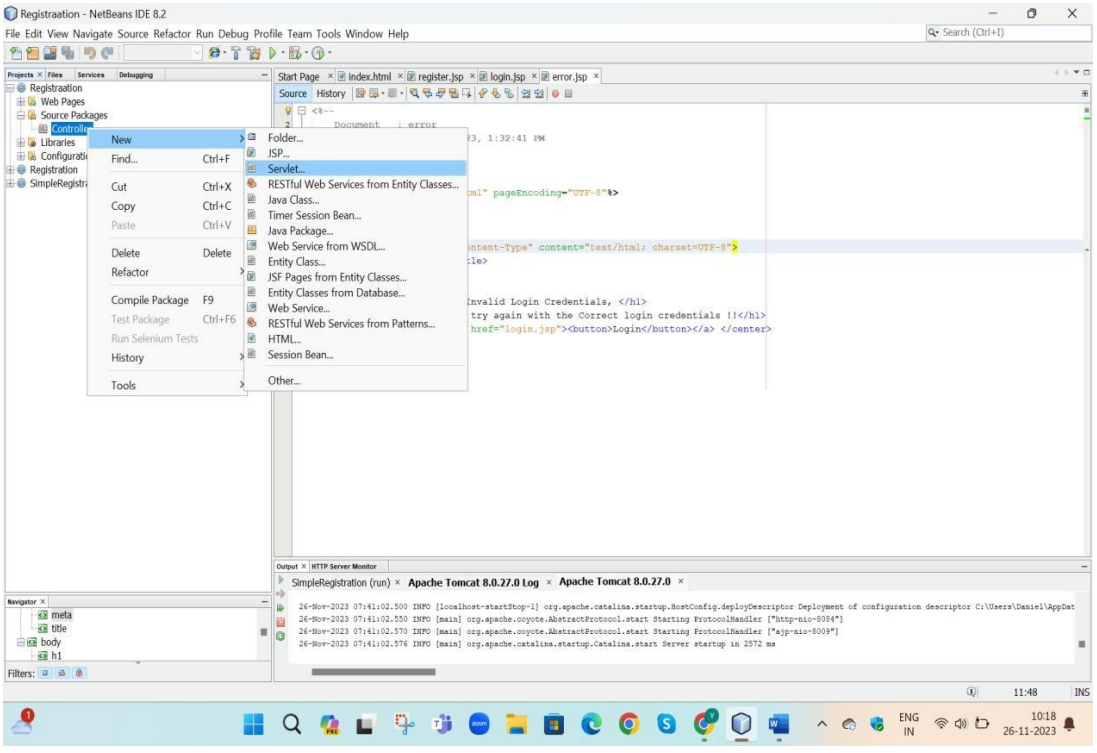
Before creating Servlets, make sure to create **Folder name** with "**Controller**" as displayed below:



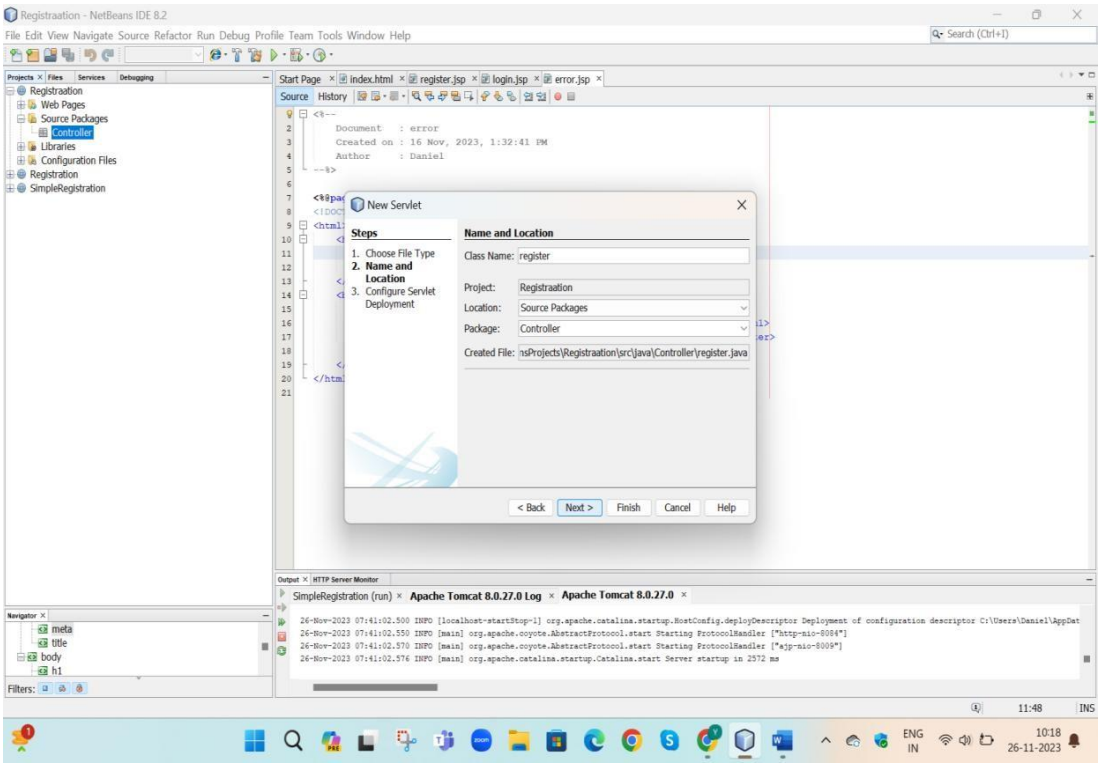
Hit **Finish** button finally.

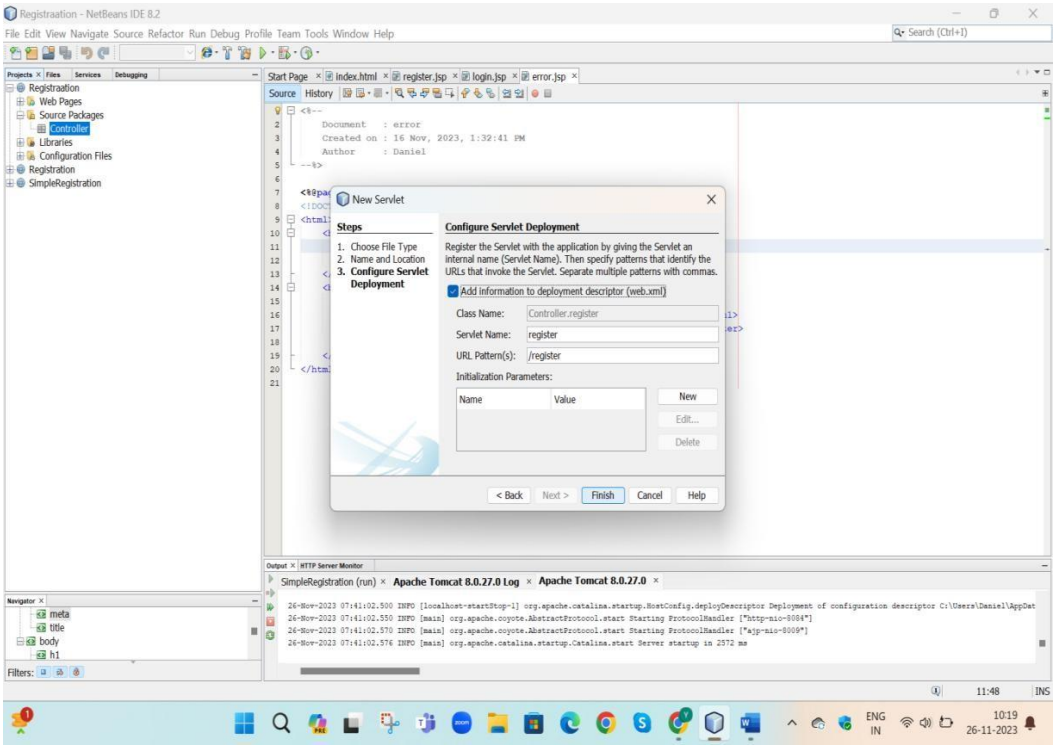


Now to create **Servlets page:**

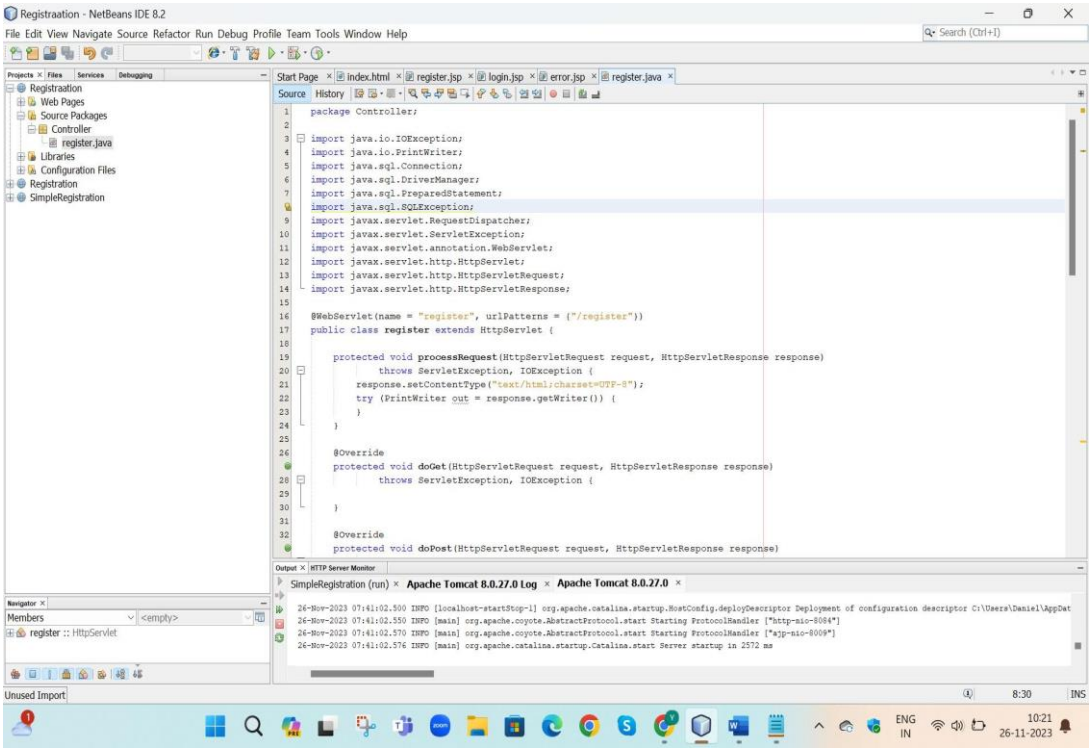


File name with “**register**” as shown below:

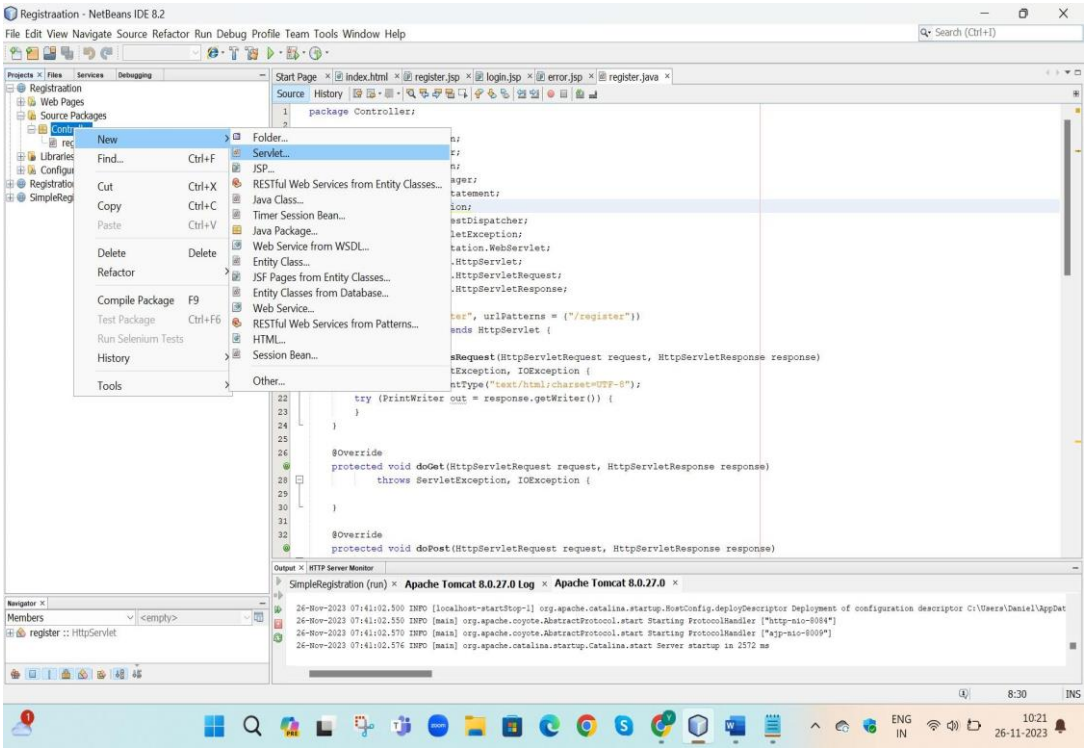


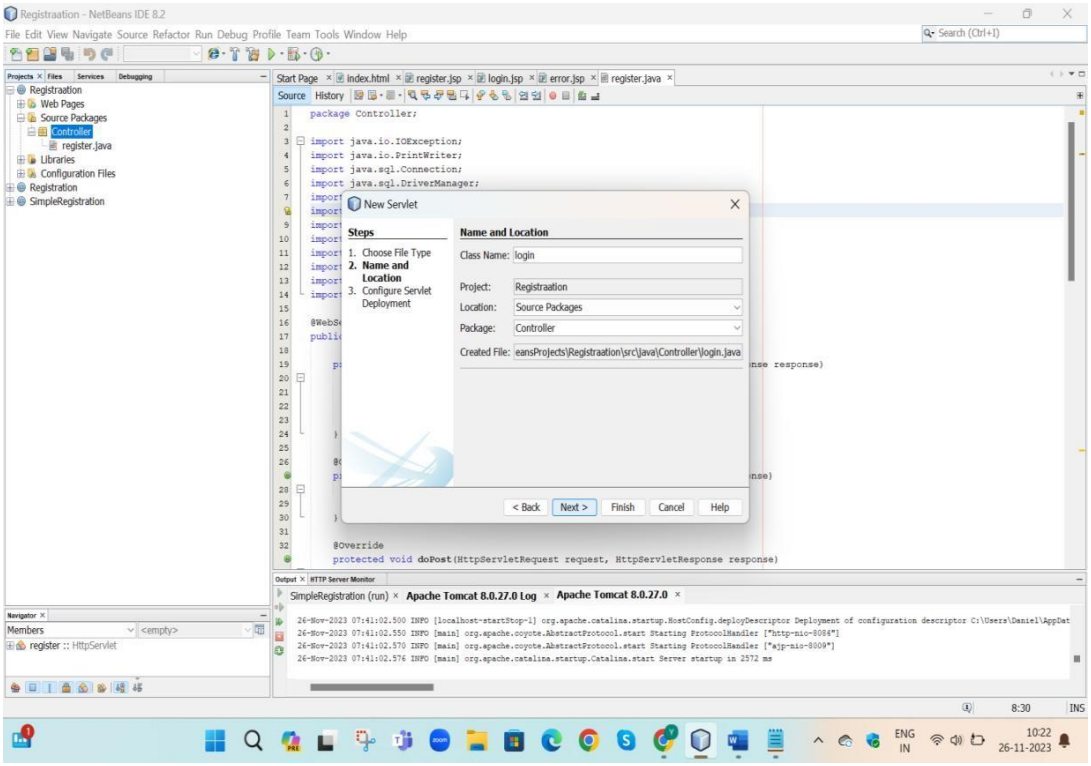


Add checkbox and Hit **Finish** and enter the code by removing the default code from it as shown below:

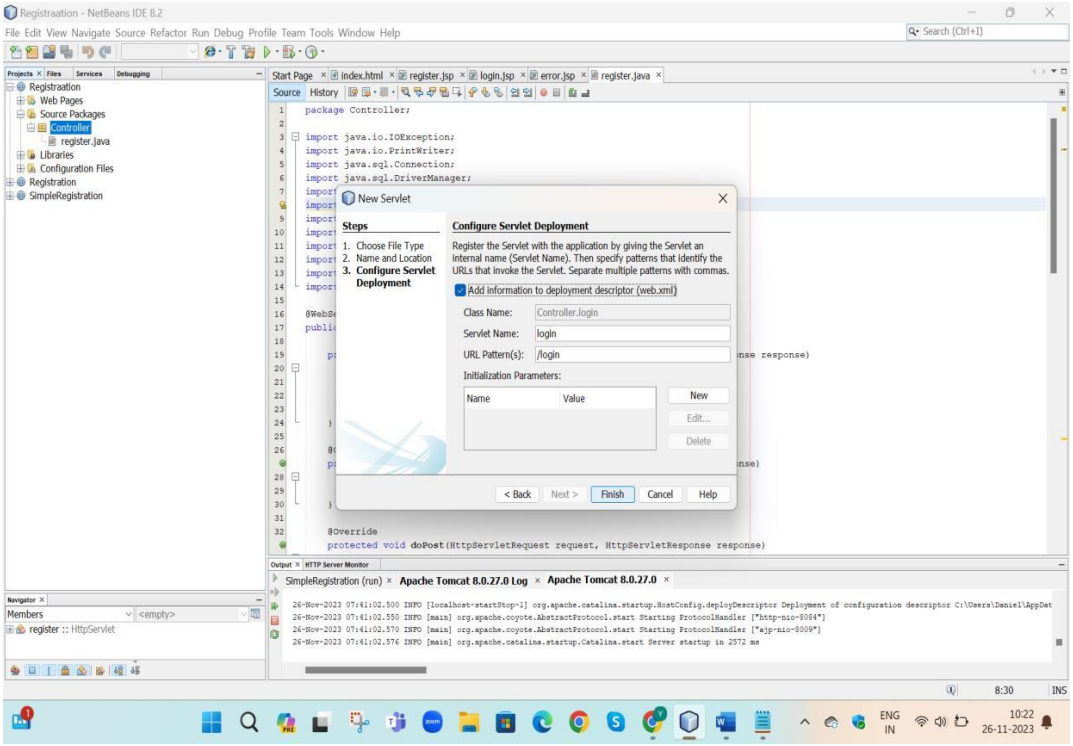


Again, create another file name with "**login**" as shown below:

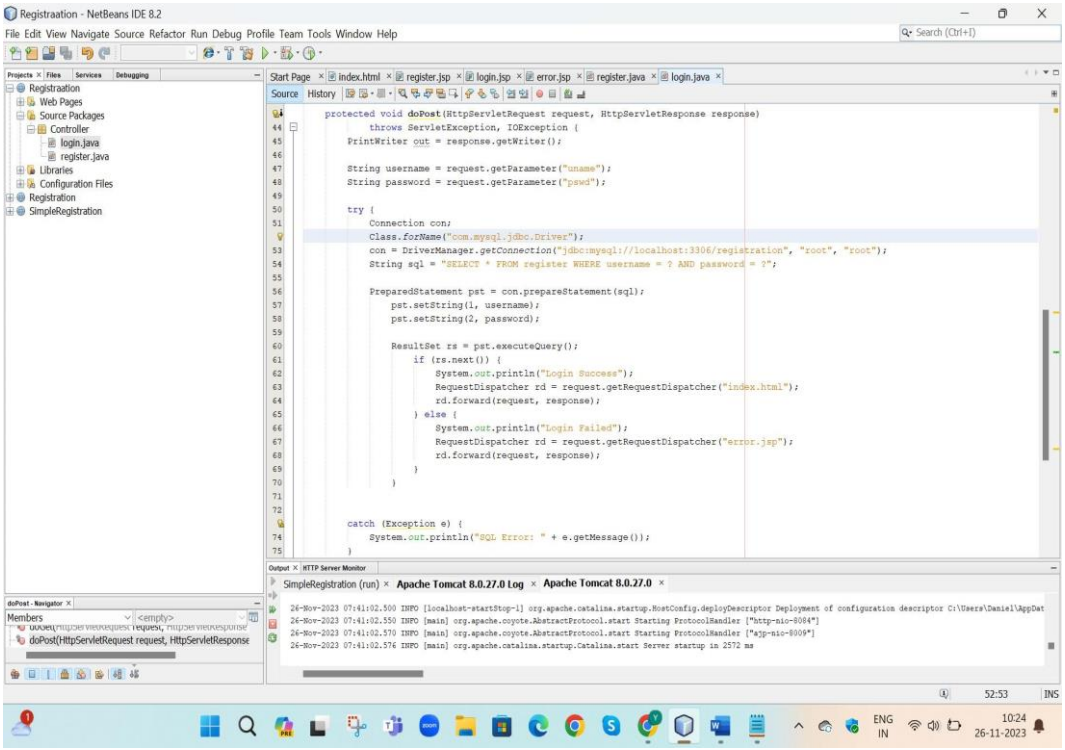



Registraation - NetBeans IDE 8.2
New Servlet
Steps
1. Choose File Type
2. Name and Location
3. Configure Servlet Deployment
Name and Location
Class Name: login
Project: Registraation
Location: Source Packages
Package: Controller
Created File: eansProjects\Registraation\src\java\Controller\login.java
< Back
Next >
Finish
Cancel
Help

Hit **next** and


Registraation - NetBeans IDE 8.2
New Servlet
Steps
1. Choose File Type
2. Name and Location
3. Configure Servlet Deployment
Configure Servlet Deployment
Register the Servlet with the application by giving the Servlet an internal name (Servlet Name). Then specify patterns that identify the URLs that invoke the Servlet. Separate multiple patterns with commas.
Add information to deployment descriptor (web.xml)
Class Name: Controller.login
Servlet Name: login
URL Pattern(s): /login
Initialization Parameters:
Name
Value
New
Edit...
Delete
< Back
Next >
Finish
Cancel
Help

Mark the checkbox “Add Information(web.xml)” and hit **Finish** button and enter the code for it by removing the default code as shown below:



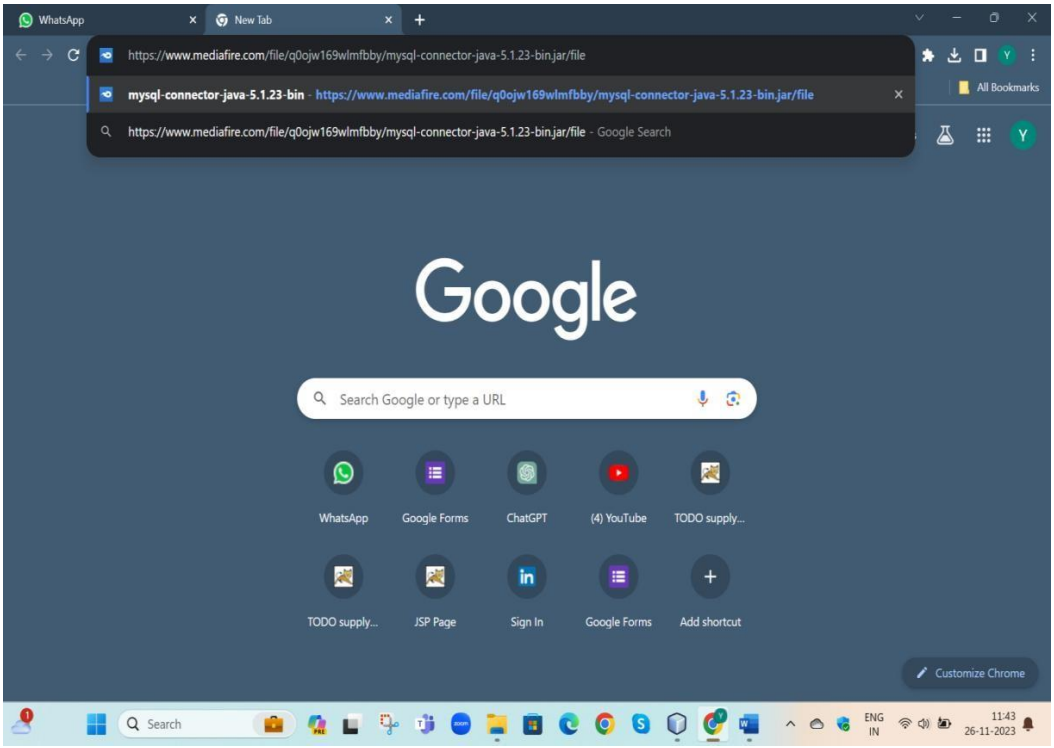
How to add Jars (Supported files):

------ > Download Jar files on your System using the below links:

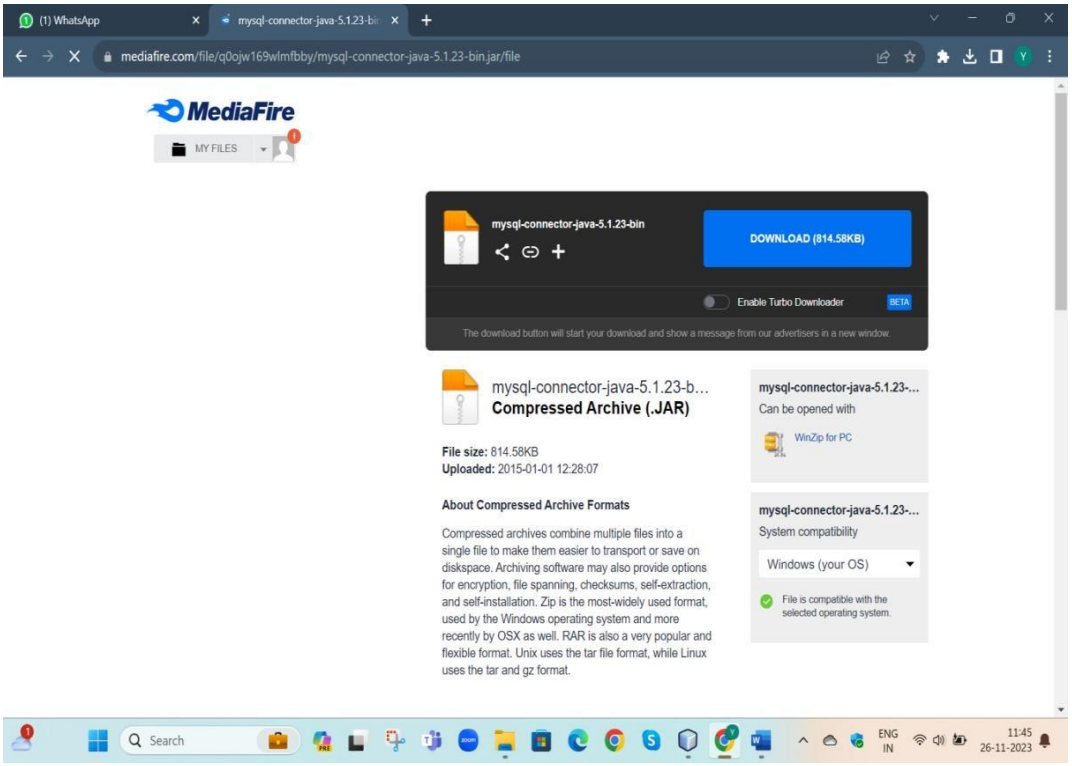
Links to Download Jars:

1. https://www.mediafire.com/file/q0ojw169wlmfbby/mysql-connector-java-5.1.23-bin.jar/file
2. https://www.mediafire.com/file/f3l49kv9xczcpco/cos-multipart.jar/file
3. https://www.mediafire.com/file/kynp64sxy40vlvh/gson-2.2.2.jar/file
4. https://www.mediafire.com/file/rah5o9dh7yqces6/java-mail-1.4.4.jar/file

Copy each link and paste in browser as shown below:



This will redirect you to media fire website, there you will find Download button, just hit **Download** button to download the respective jar files as shown below:

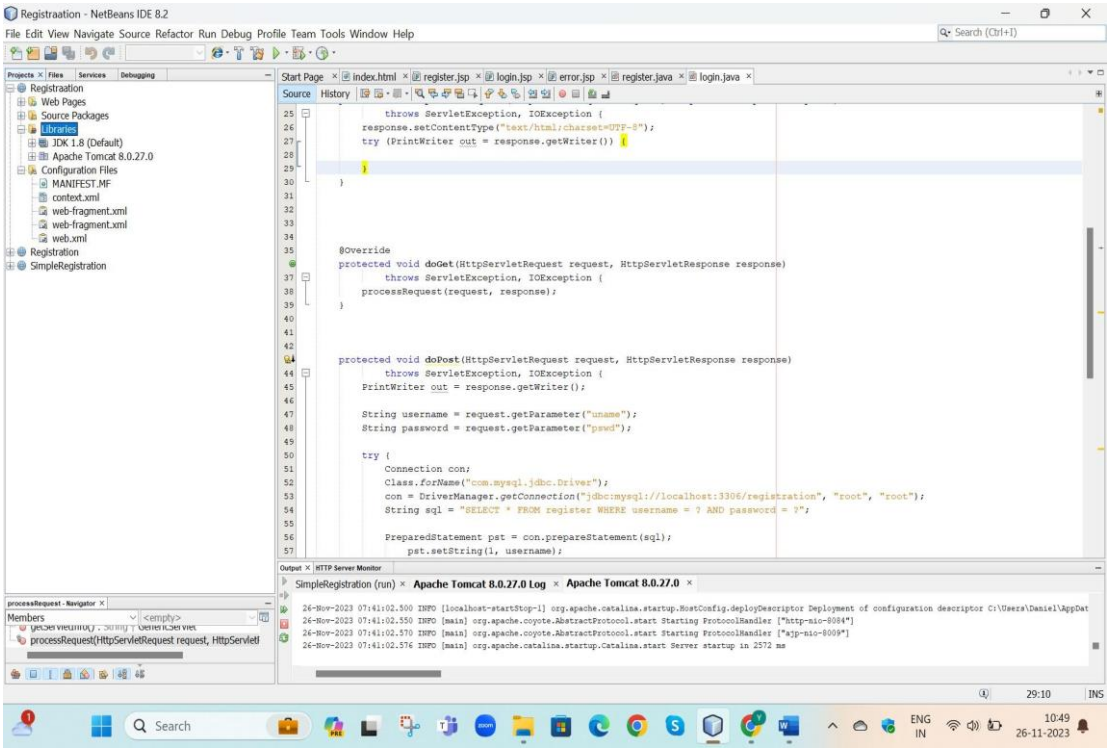


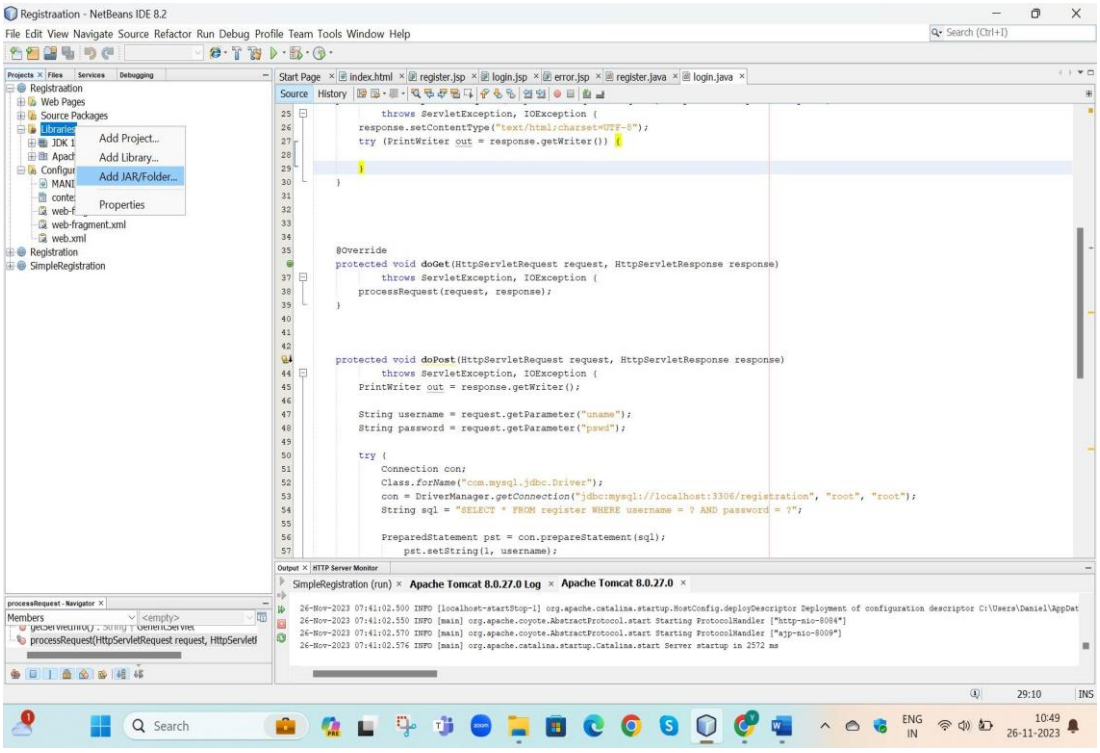
The respective files will be downloaded for you as soon as you click on **Download** button.

Hence, **Repeat the same process for downloading the other 3 jar files.** After downloaded these 4 files, you have to upload these files to our NetBeans Project that we have created so far as shown below:

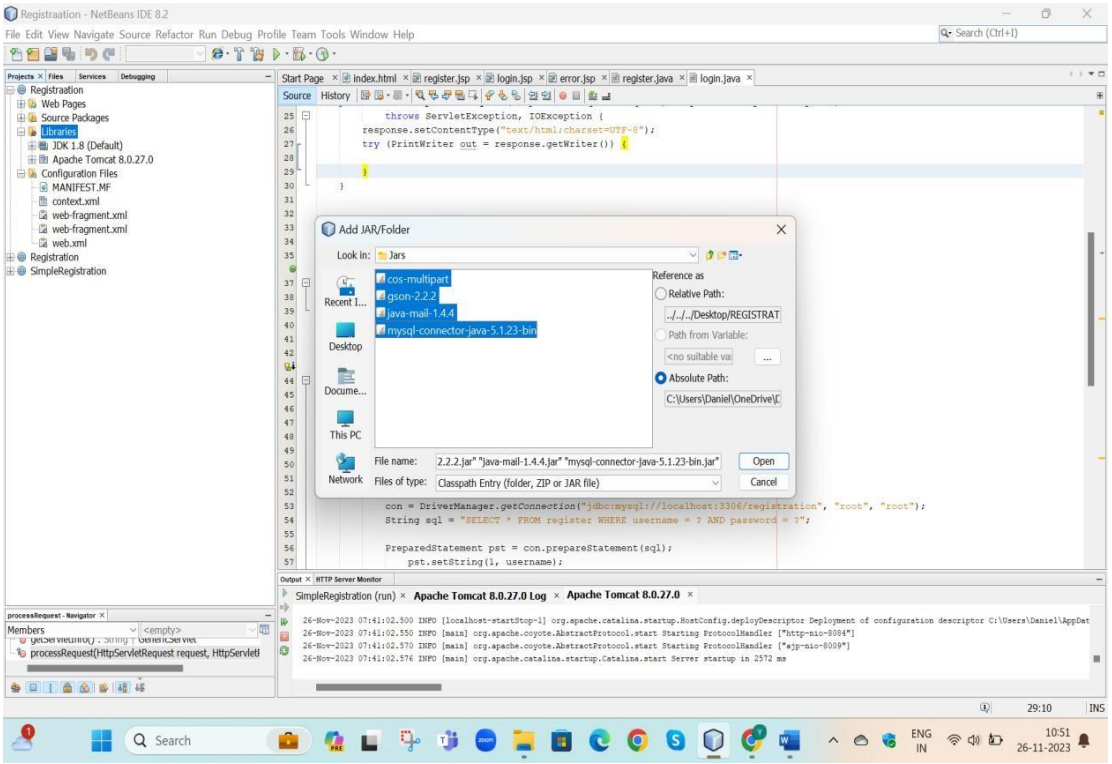
For **Uploading jars**, follow the below process:

Select **Libraries** Folder -> Right Click -> Choose option (**Add JAR/Folder**) as shown below:



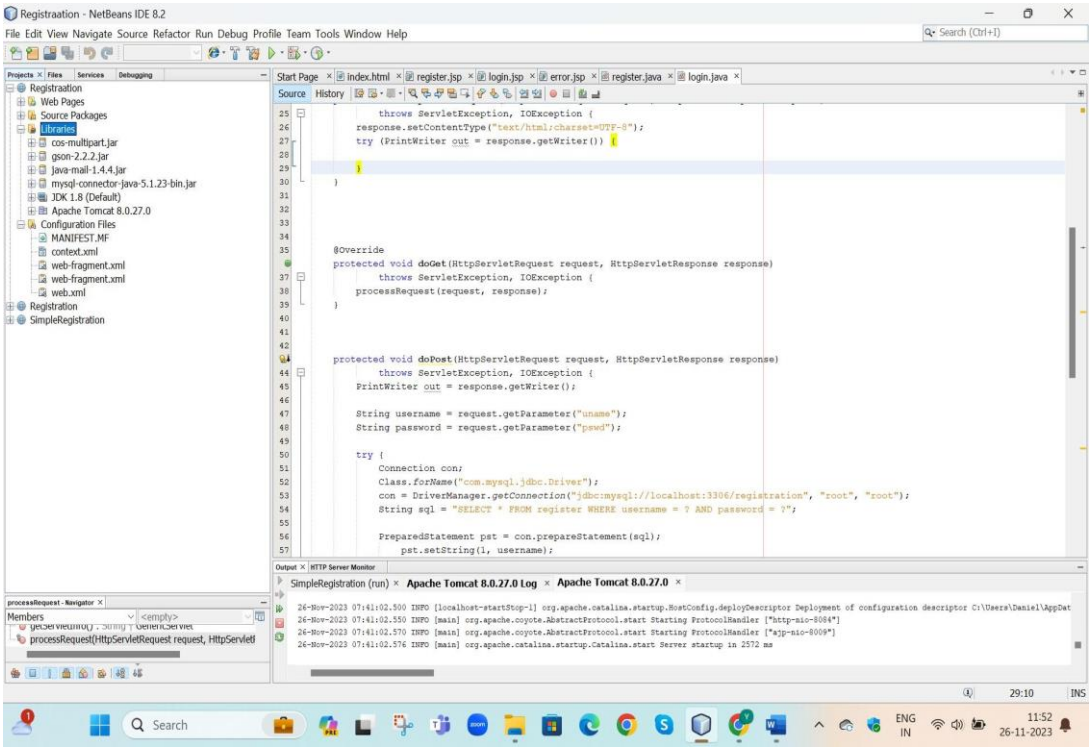


After clicking on **Add JAR/Folder** option, the following dialogue box will appear, you have to navigate to the location where you had downloaded the jar files, which enables us to upload jar files as displayed in the screenshot below:



Select all 4 necessary downloaded files and click on **Open** button to upload.

Hence, you will see jar files being added to Libraries Folder, as soon as you click on **Open** button as displayed below:



In this way, you can add Jar Files to your NetBeans Project.

Source Code:

HTML Files:

index.html:

```
<!DOCTYPE html>
<!--
To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.
-->
<html>
  <head>
    <title>TODO supply a title</title>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <style>
      .container
      {
        width: 100%;
        height: 50px;
        background: darkgray;
      }
      li
      {
        float: left;
        text-decoration: none;
        list-style: none;
        padding: 10px 10px 10px;
```

```
        }
        li a{
            color: white;
             text-decoration: none;
        }
    </style>
</head>
<body>
    <div class = "container">
        <nav>
```

```
            <ul>
                <li><a href = "index.html" >HOME</a></li>
                <li><a href = "index.html" >ABOUT</a></li>
                <li><a href = "index.html" >CONTACT</a></li>
                <li style="float: right;"><a href =
"register.jsp" >REGISTER</a></li>
                <li style="float: right;"><a href = "login.jsp" >LOGIN</a></li>
                <li><a href = "index.html" >OUR SERVICES</a></li>
            </ul>
          </nav>
      </div>
   </body>
</html>
```

JSP Files:

register.jsp:

```
<%--
   Document: register
   Created on: 15 Nov, 2023, 6:15:40 PM
   Author: Daniel
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-
8">
      <title>JSP Page</title>
      <style>
```

```
.re      terconatiner
gis      {
            width: 100%;
            height: auto;
            text-align: center;
         }
      </style>
   </head>
   <body>
      <div class = "registerconatiner">
```

```
            <form method="post" action="register">
                <label>Full Name:</label><br/>
                <input type="text" placeholder="ENTER YOUR NAME"
name="fname" required=""><br/>
                <label>User Name:</label><br/>
                <input type="text" placeholder="ENTER USER NAME"
name="uname" required=""><br/>
                <label>Email:</label><br/>
                <input type="email" placeholder="ENTER YOUR EMAIL"
name="email" required=""><br/>
                <label>Password:</label><br/>
                <input type="password" placeholder="ENTER YOUR PASSWORD"
name="pswd" required=""><br/>
                <span style="display: none">Enter Minimum 8 characters</span>
                <label>Confirm Password:</label><br/>
                <input type="password" placeholder=" RECONFIRM PASSWORD"
name="cfmpswd" required=""><br/>
                <span style="display: none">Both the passwords should
match</span><br/>
                <input type="submit" value="Register"><br/>
            </form>
        </div>
    </body>
</html>
```

login.jsp:

```
<%--
    Document: login
    Created on: 16 Nov, 2023, 1:01:26 PM
    Author: Daniel
```

```
--%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-
8">
        <title>JSP Page</title>
    </head>
    <body align="center">
```

```
        <form method="post" action="login">
        <label>User Name:</label><br/>
            <input type="text" placeholder="ENTER USER NAME"
    name="uname" required=""><br/>
        <label>Password:</label><br/>
        <input type="password" placeholder="ENTER YOUR PASSWORD"
    name="pswd" required=""><br/><br/>
            <input type="submit" value="Login"><br/>
        </form>
    </body>
    </html>
```

error.jsp:

```
    <%--
        Document: error
        Created on: 16 Nov, 2023, 1:32:41 PM
        Author: Daniel
    --%>
    <%@page contentType="text/html" pageEncoding="UTF-8"%>
    <!DOCTYPE html>
    <html>
        <head>
            <meta http-equiv="Content-Type" content="text/html; charset=UTF-
    8">
            <title>JSP Page</title>
        </head>
        <body>
            <h1 align="center">Invalid Login Credentials, </h1>
```

```
        <h1 align="center"> try again with the Correct login
    credentials !!</h1>
                <center> <a href="login.jsp"><button>Login</button></a>
    </center>
       </body>
    </html>
```

SERVLETS (. Java Files):register.java:

```
    package Controller;
    import java.io.IOException;
    import java.io.PrintWriter;
```

```
import java.sql.Connection;
import java.sql.DriverManager;

import java.sql.PreparedStatement;
import java.sql.SQLException;

import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;


@WebServlet(name = "register", urlPatterns = {"/register"})
public class register extends HttpServlet

{

protected void processRequest(HttpServletRequest request,
HttpServletResponse response)

        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {

    }

  }

  @Override

  protected void doGet(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {

  }

  @Override

  protected void doPost(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {
        PrintWriter out = response.getWriter();
```

```
String fullname = request.getParameter("fname");
String username = request.getParameter("uname");
String email = request.getParameter("email");
String password = request.getParameter("pswd");
String confirmpassword = request.getParameter("cfmpswd");

try {
   Connection con;
```

```
            Class.forName("com.mysql.jdbc.Driver");
            con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/registration",
"root", "root");
            System.out.println("Connected to Database");
            String sql = "INSERT INTO register (fullname, username, email,
password, confirmpassword) VALUES (?, ?, ?, ?, ?)";
            PreparedStatement pst = con.prepareStatement(sql);
           pst.setString(1, fullname);
           pst.setString(2, username);
           pst.setString(3, email);
           pst.setString(4, password);
           pst.setString(5, confirmpassword);
           pst.executeUpdate();
            System.out.println("Regsitation Success");
            RequestDispatcher rd = request.getRequestDispatcher("index.html");
            rd.forward(request, response);
        }
catch (Exception e)
 {
            System.out.println("Error :: " + e.getMessage());
        }
    }
    @Override
    public String getServletInfo()
{
        return "Short description";
    }
}
```

login.java:

```
package Controller;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;

import java.sql.PreparedStatement;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
```

```
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;


@WebServlet(name = "login_1", urlPatterns = {"/login_1"})
public class login extends HttpServlet

{

protected void processRequest(HttpServletRequest request,
HttpServletResponse response)

        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {

    }

  }

  @Override

  protected void doGet(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {
    processRequest(request, response);

  }


  protected void doPost(HttpServletRequest request, HttpServletResponse
response)

        throws ServletException, IOException {
    PrintWriter out = response.getWriter();

    String username = request.getParameter("uname");
    String password = request.getParameter("pswd");


    try {
```

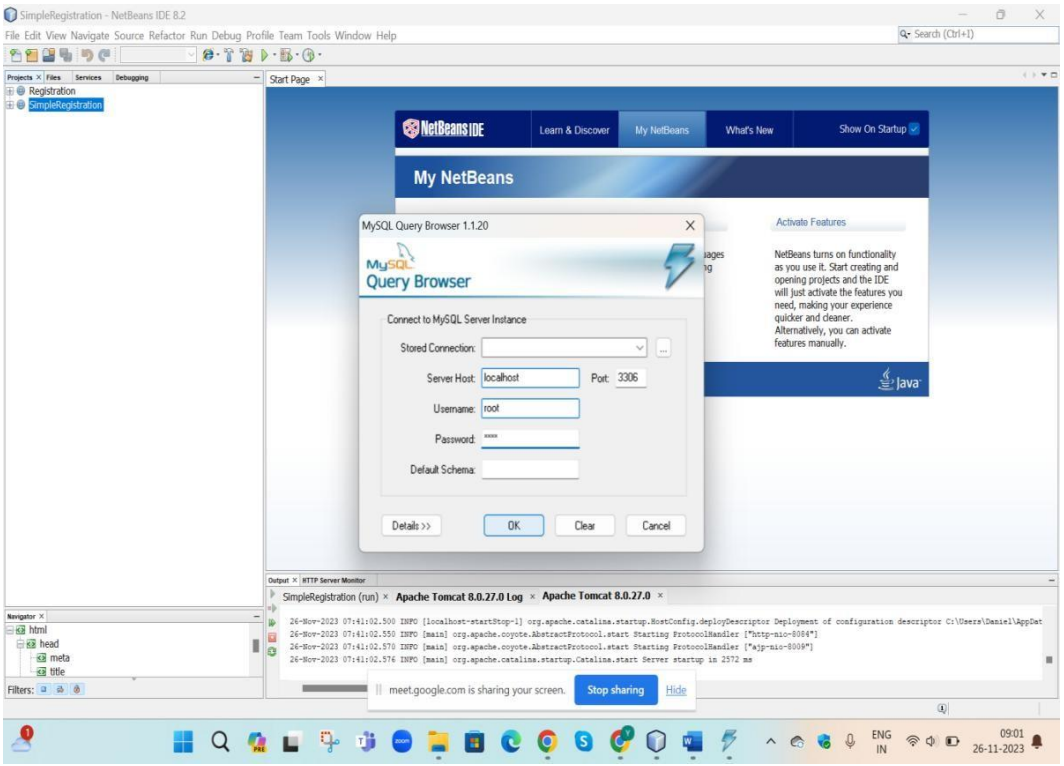
```
        Connection con;
        Class.forName("com.mysql.jdbc.Driver");
        con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/registration",
"root", "root");
        String sql = "SELECT * FROM register WHERE username = ? AND
password = ?";
           PreparedStatement pst = con.prepareStatement(sql);
            pst.setString(1, username);
            pst.setString(2, password);
```

```
            ResultSet rs = pst.executeQuery();
              if (rs.next())
        {
                System.out.println("Login Success");
                RequestDispatcher rd =
request.getRequestDispatcher("index.html");
                rd.forward(request, response);
              }
        else
        {       System.out.println("Login Failed");
                RequestDispatcher rd =
request.getRequestDispatcher("error.jsp");
                rd.forward(request, response);
              }
            }
catch (Exception e)
{
         System.out.println("SQL Error: " + e.getMessage());
      }
   }
   @Override
   public String getServletInfo()
{
      return "Login Servlet";
   }
}
```

Database Querying:

Open MySQL Query Browser and enter the following login credentials to logon to MySQL Query Browser:

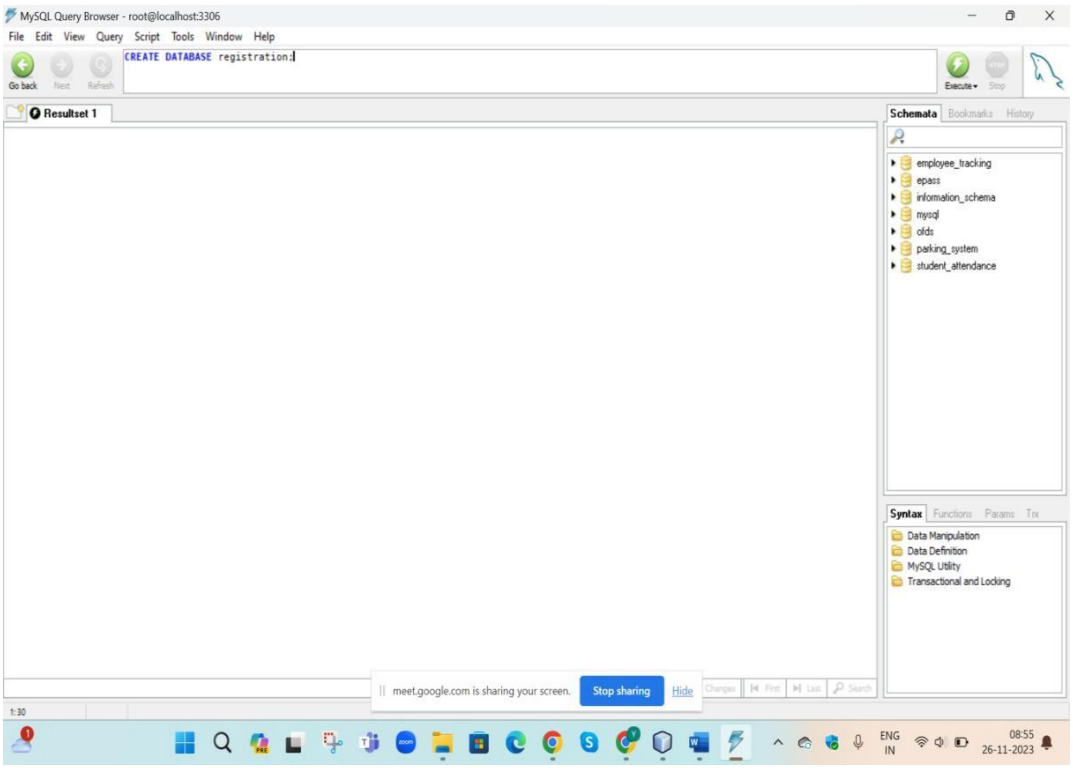
Server Host: localhost
Username: root
Password: root



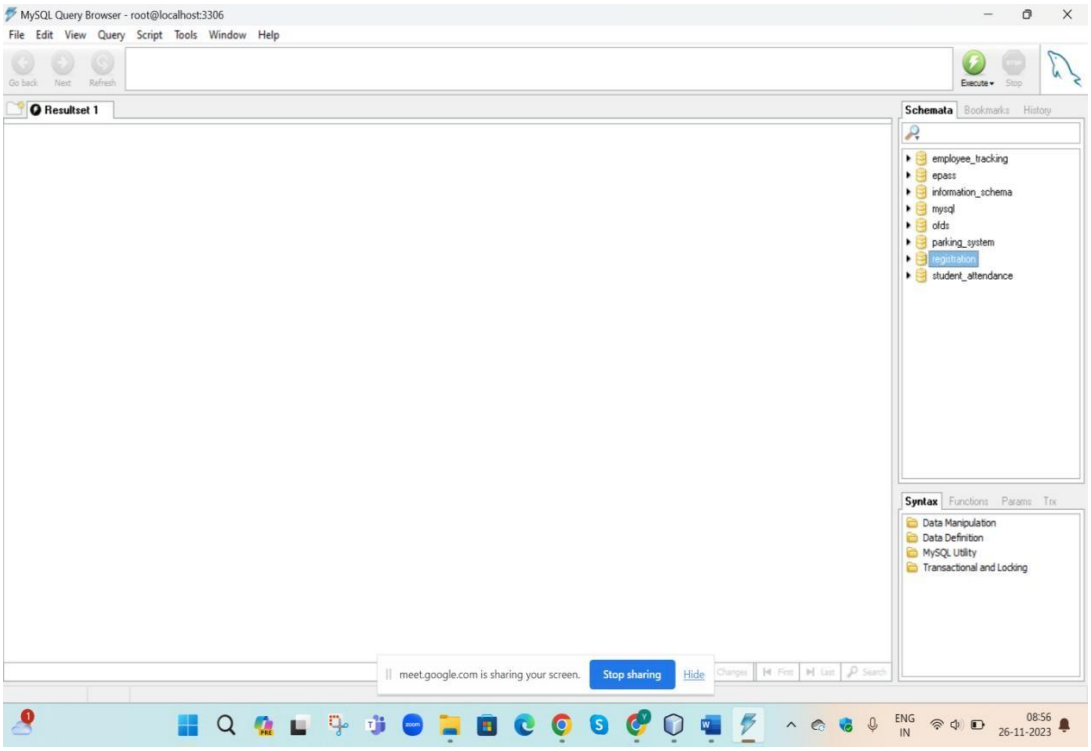
MySQL commands as follows:

1. To create Database, use the following command and hit execute button which is visible on the right-hand side corner:

CREATE DATABASE registration;

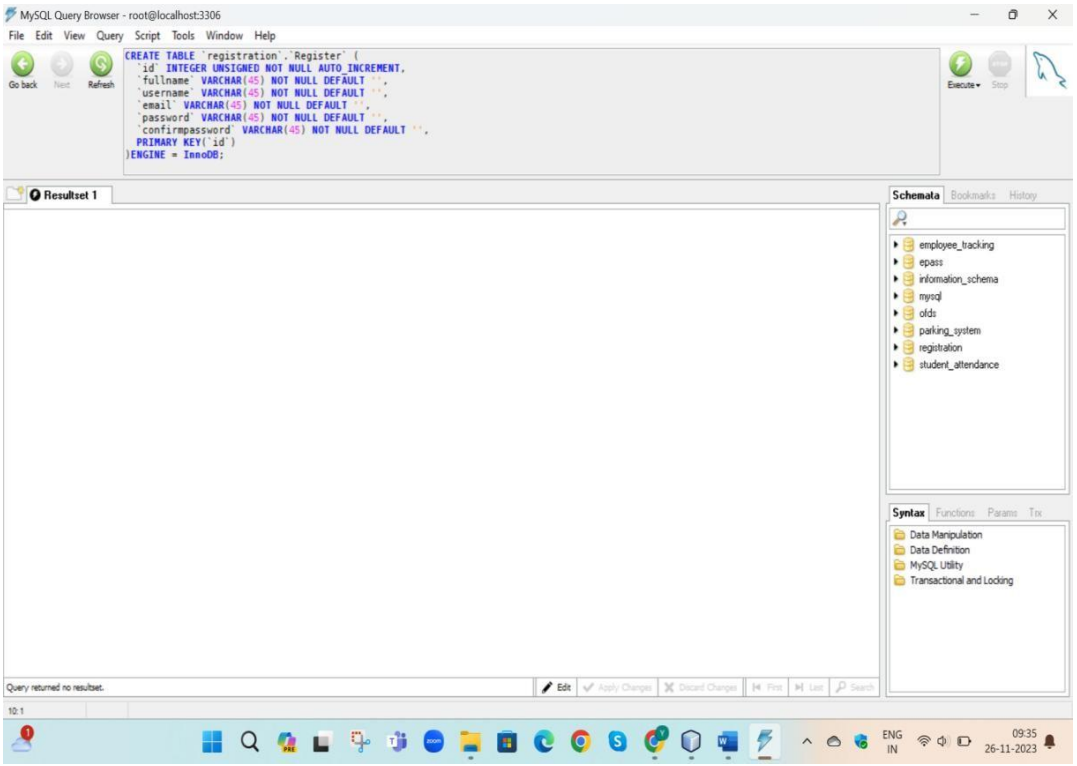


After successfully executing this query, the SQL query will create Database name with "**registration**" as shown below (if changes not reflected, just close this query browser and open again)

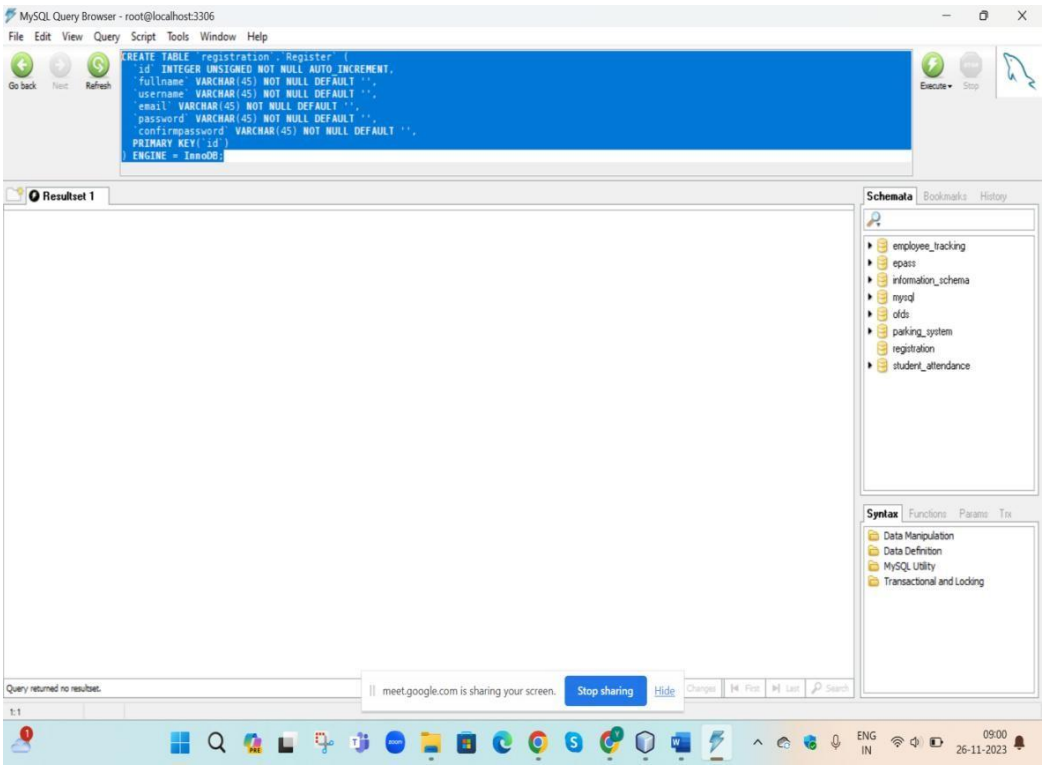


2. To create “register” table in “registration” Database, use the following query:

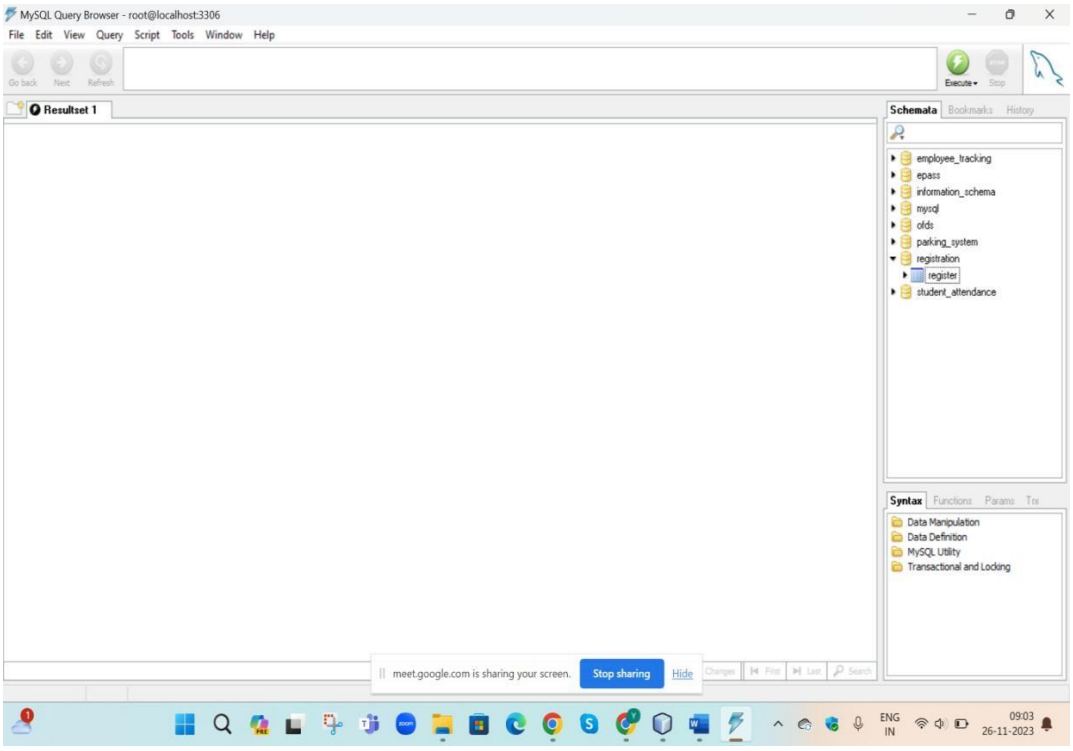
```
CREATE TABLE `registration`.`Register` (
  `id` INTEGER UNSIGNED NOT NULL AUTO_INCREMENT,
  `fullname` VARCHAR(45) NOT NULL DEFAULT '',
  `username` VARCHAR(45) NOT NULL DEFAULT '',
  `email` VARCHAR(45) NOT NULL DEFAULT '',
  `password` VARCHAR(45) NOT NULL DEFAULT '',
  `confirmpassword` VARCHAR(45) NOT NULL DEFAULT '',PRIMARY KEY(`id`)
)ENGINE = InnoDB;
```



enter the query as specified above and hit execute button.

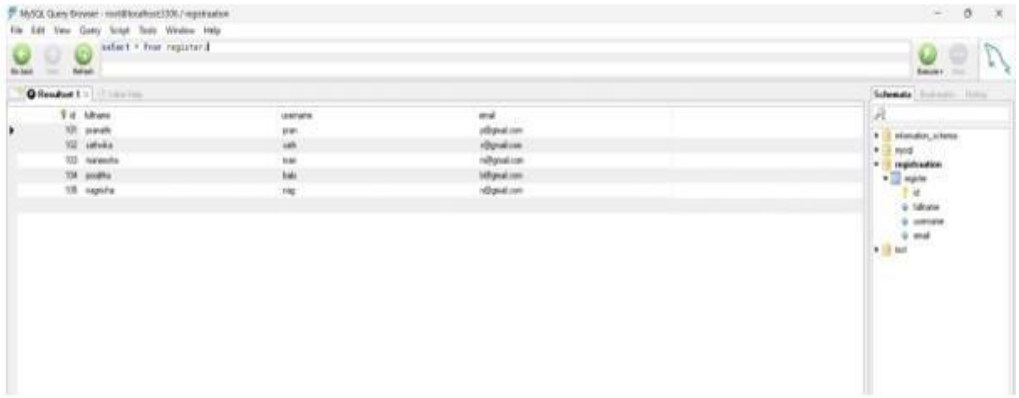


Upon successfully executing this query, we will see Database table created with name “**register**” as shown below (if changes not reflected, just close this query browser and open again)



3. To retrieve the data from the “register” table, use the below command:

SELECT * FROM `registration`.`register`;



4. To delete the rows(data) from the table “register”, use the following command:

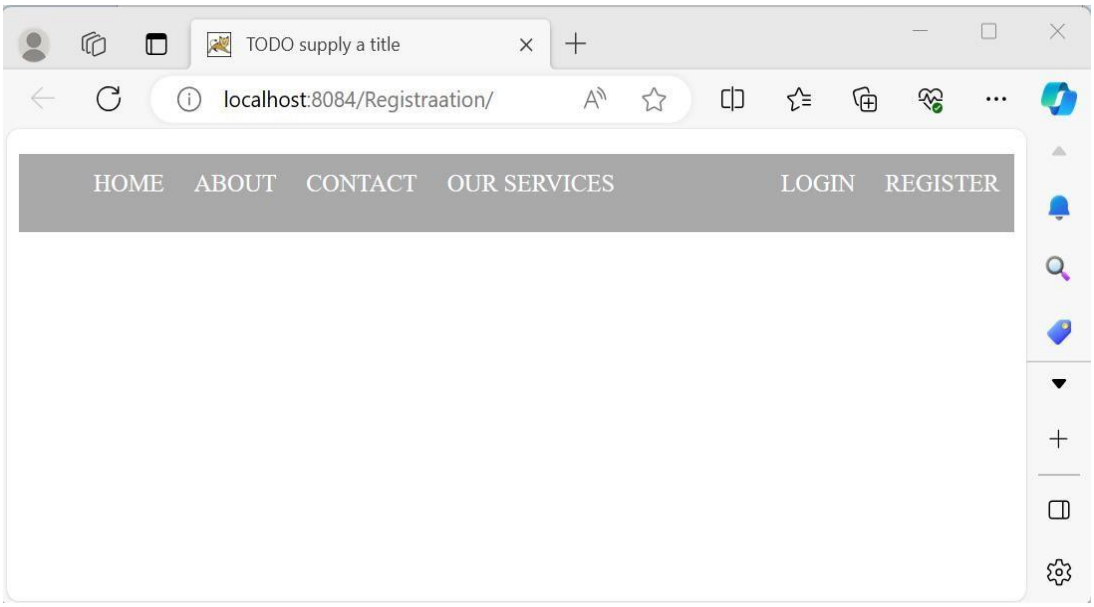
delete FROM `registration`.`register`;

5. To start a new record with serial number “1” after performing delete operation, use the following command:

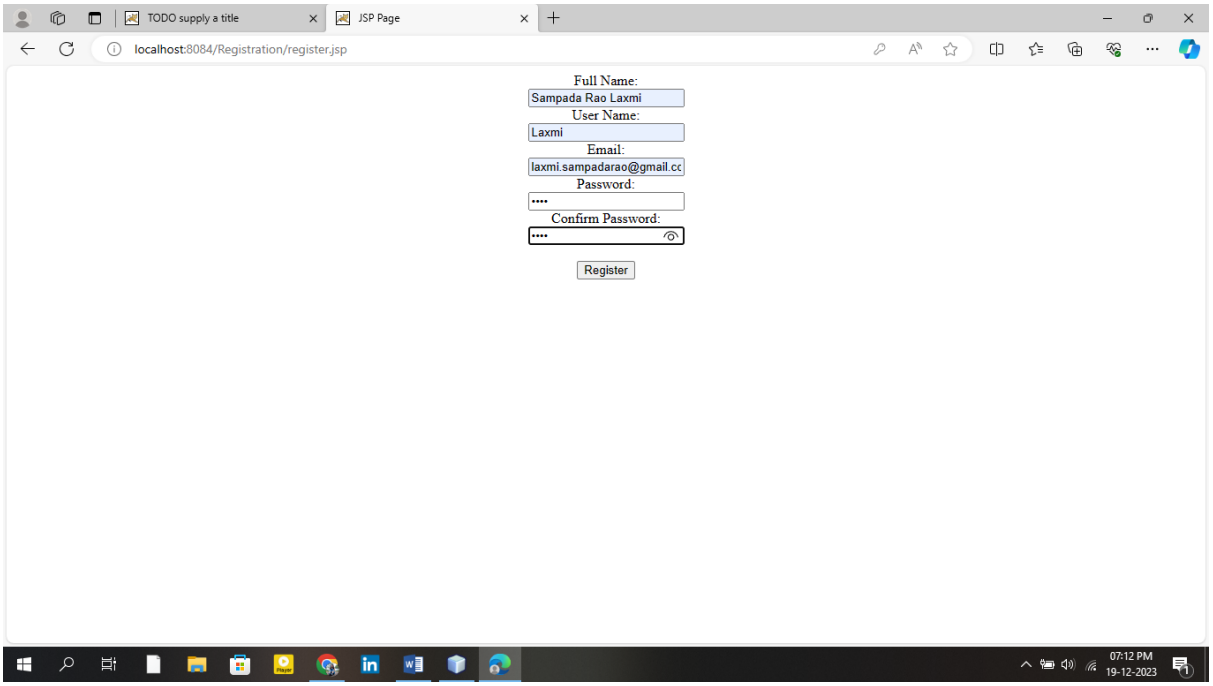
alter table `registration`.`register` auto_increment = 1;

OUTPUTS:

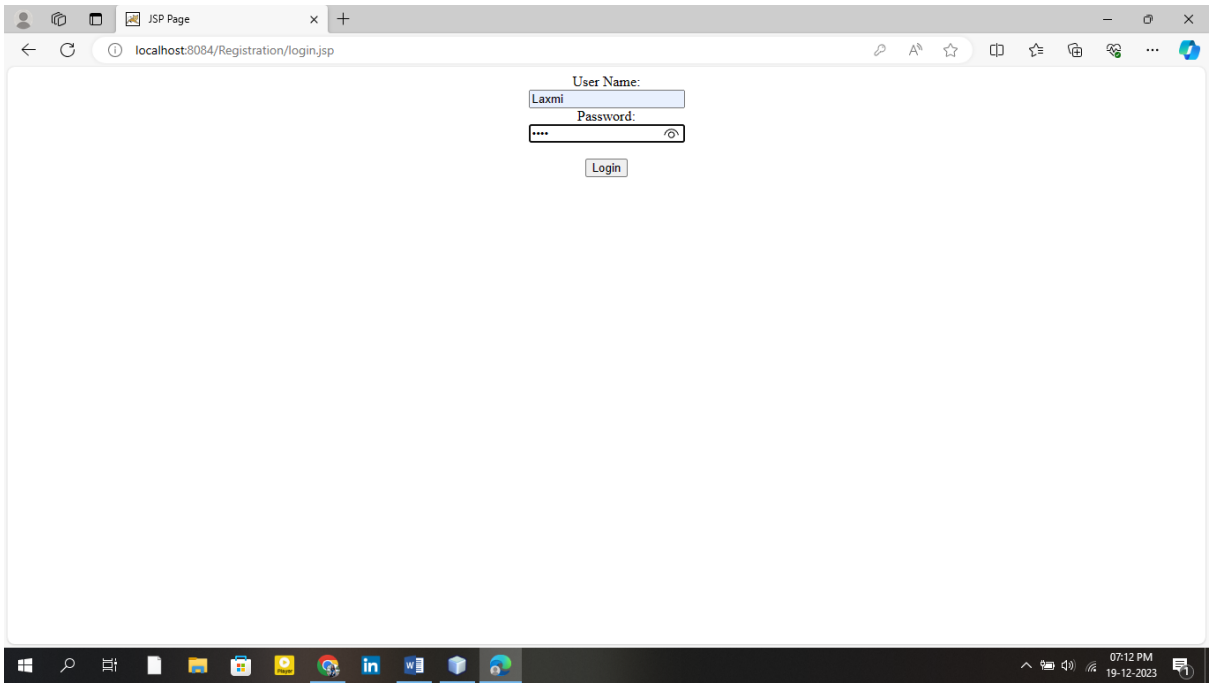
1. **Landing Page** consists of Navigation bar containing components like **HOME**, **ABOUT**, **CONTACT**, **OUR SERVICES**, **LOGIN** AND **REGSITER** buttons as shown below:



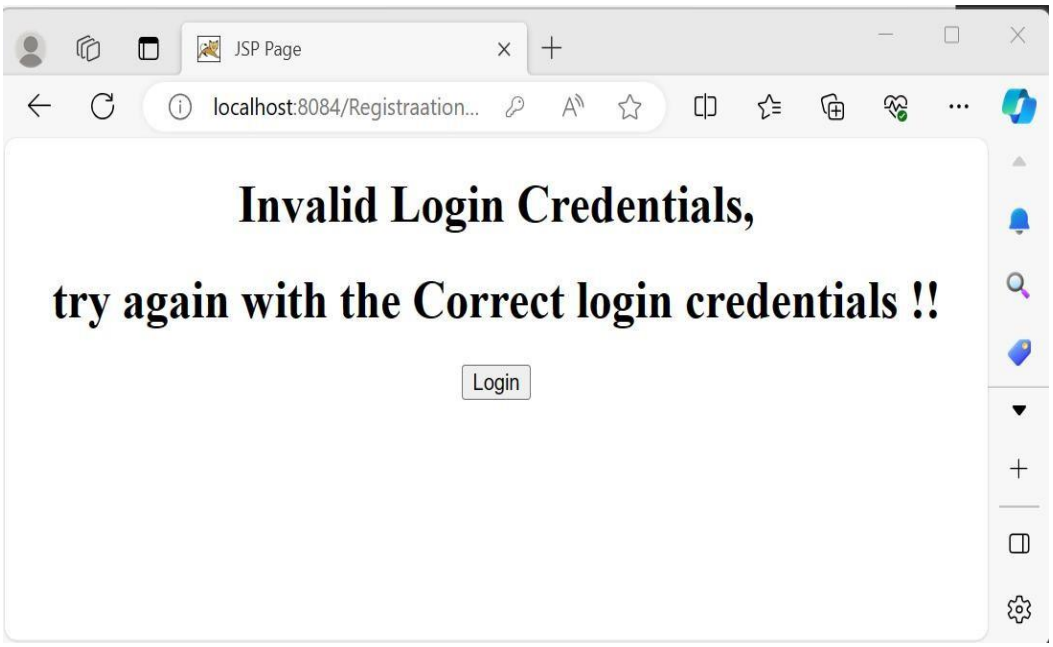
2. **User** has to be registered at first, if he/she wanted to login as shown below:



3. Upon successful registration, the User can login into his/her account with registered Username and Password as shown below:



4. If User not yet created account, trying to login and authenticate into his/her account, the user gets an error as shown below:



Conclusion:

In conclusion, The Short Term Internship project successfully leverages the robust features of the languageto deliver a scalable and efficient solution. The use ofobject-oriented principles, coupled with multi-threading and exception handling, enhances the project's reliability and maintainability. The modular design ensures flexibilityand ease of future expansions. Overall, the short term internship demonstrates a proficient application of Core Java concepts, resulting in a well-structured and high- performing soft