IT5512- WEB TECHNOLOGY LAB-SESSION-1

DATE: 17/08/22 FN

BASIC JAVA PROGRAMS

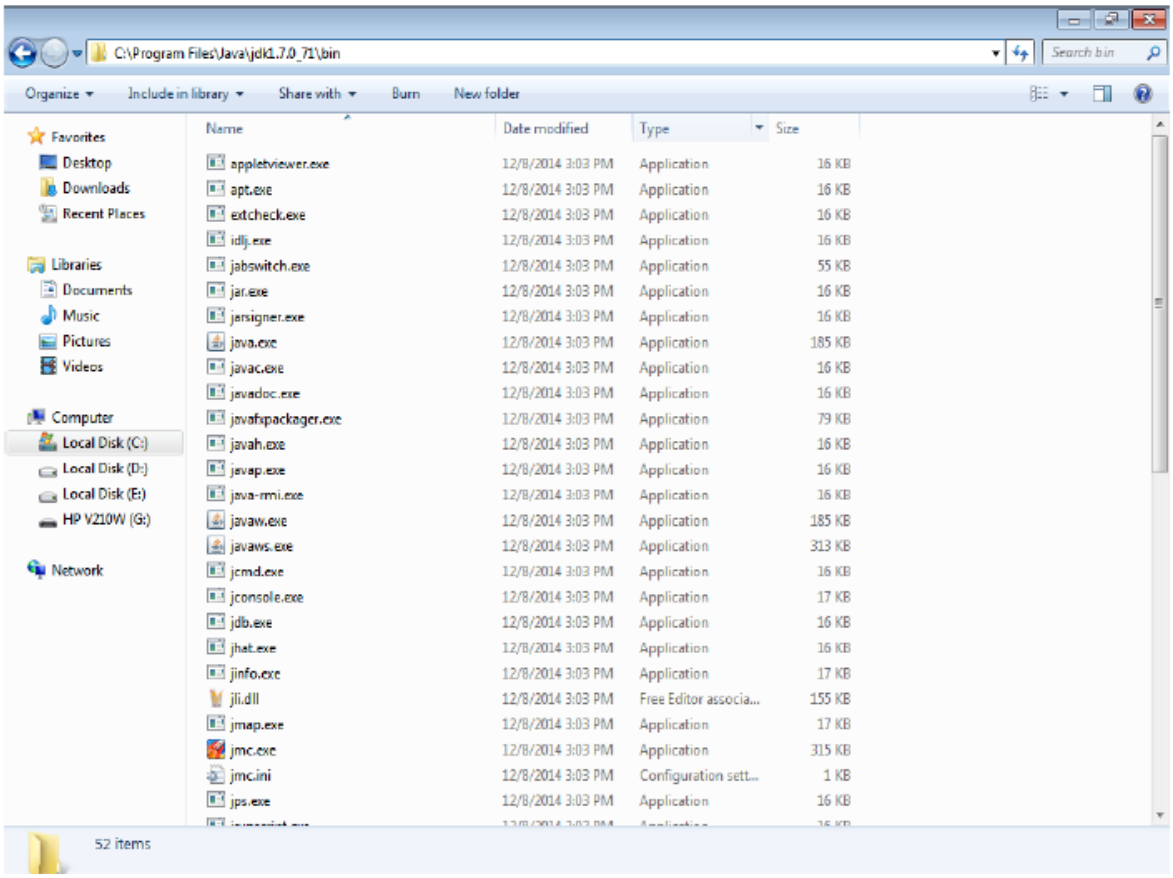
Instructions to set java path

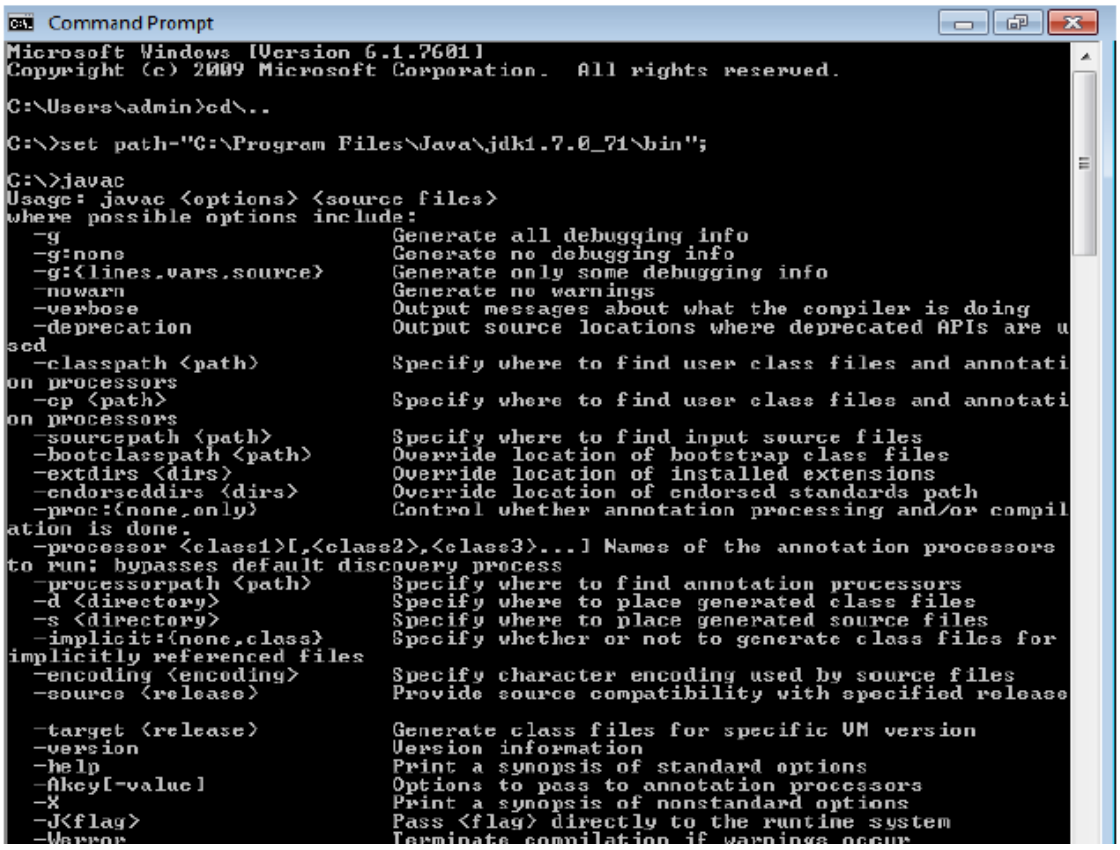
To set the path of JDK, you need to follow following steps:

- Open command prompt
- copy the path of jdk/bin directory
- write in command prompt: set path=copied_path

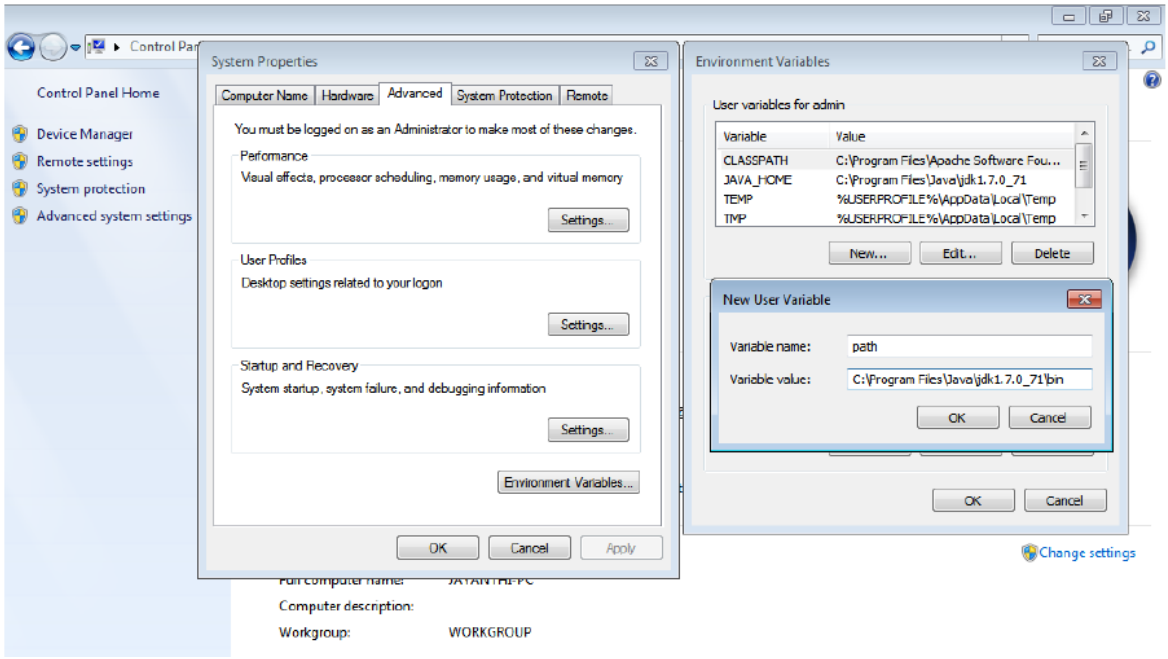
Command to set path:

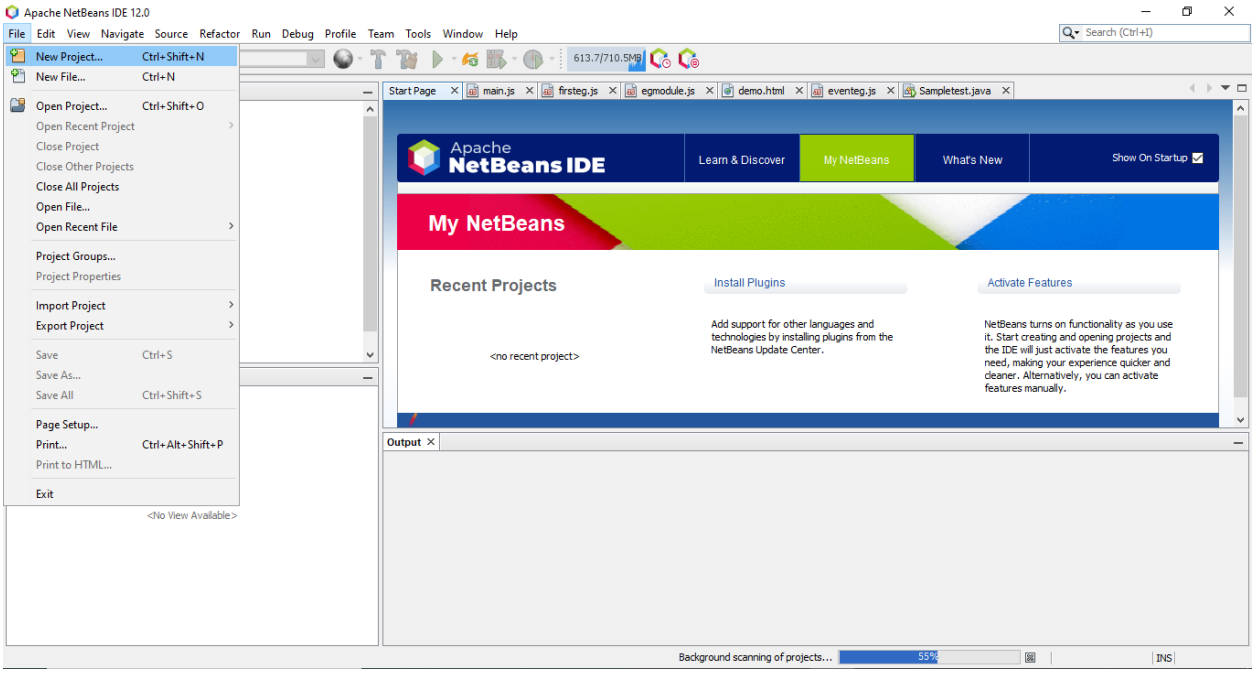
set path=C:\Program Files\Java\jdk1.6.0_23\bin

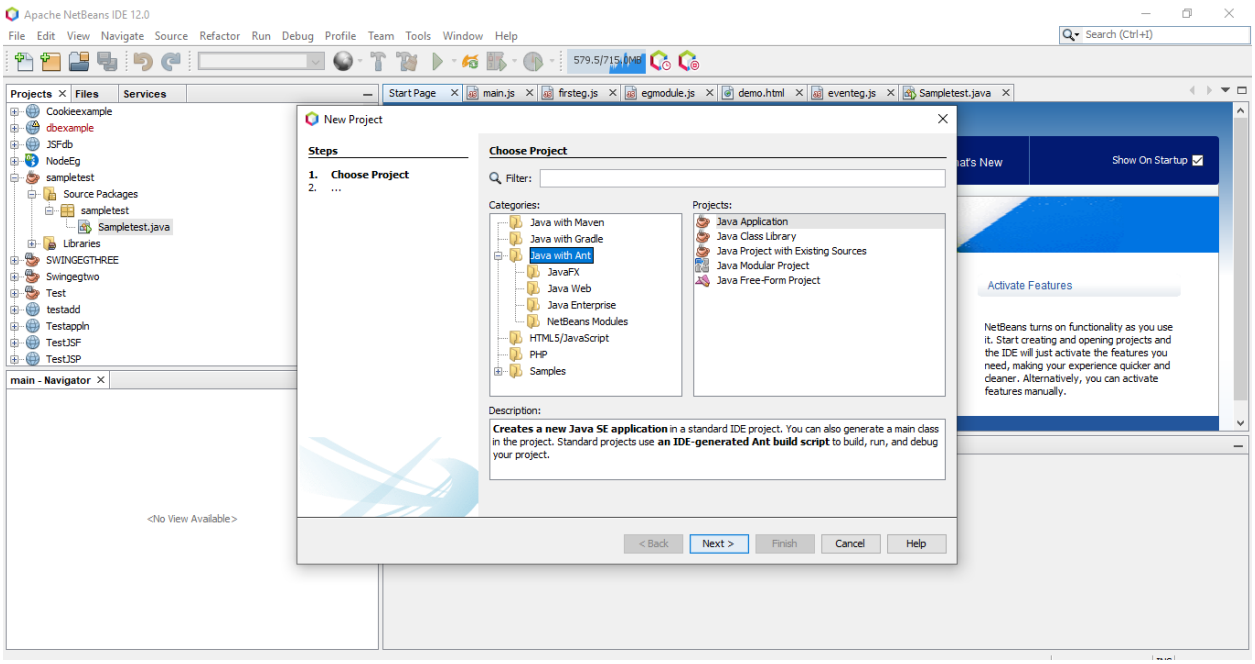

C:\Program Files\Java\jdk1.7.0_71\bin
Search bin
Organize
Include in library
Share with
Burn
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Computer
Local Disk (C:)
Local Disk (D:)
Local Disk (E:)
HP V210W (G:)
Network
Name
Date modified
Type
Size
appletviewer.exe 12/8/2014 3:03 PM Application 16 KB
apt.exe 12/8/2014 3:03 PM Application 16 KB
extcheck.exe 12/8/2014 3:03 PM Application 16 KB
idlj.exe 12/8/2014 3:03 PM Application 16 KB
jabswitch.exe 12/8/2014 3:03 PM Application 55 KB
jar.exe 12/8/2014 3:03 PM Application 16 KB
jarsigner.exe 12/8/2014 3:03 PM Application 16 KB
java.exe 12/8/2014 3:03 PM Application 185 KB
javac.exe 12/8/2014 3:03 PM Application 16 KB
javadoc.exe 12/8/2014 3:03 PM Application 16 KB
javafxpackager.exe 12/8/2014 3:03 PM Application 79 KB
javah.exe 12/8/2014 3:03 PM Application 16 KB
javap.exe 12/8/2014 3:03 PM Application 16 KB
java-rmi.exe 12/8/2014 3:03 PM Application 16 KB
javaw.exe 12/8/2014 3:03 PM Application 185 KB
javaws.exe 12/8/2014 3:03 PM Application 313 KB
jcmd.exe 12/8/2014 3:03 PM Application 16 KB
jconsole.exe 12/8/2014 3:03 PM Application 17 KB
jdb.exe 12/8/2014 3:03 PM Application 16 KB
jhat.exe 12/8/2014 3:03 PM Application 16 KB
jinfo.exe 12/8/2014 3:03 PM Application 17 KB
jli.dll 12/8/2014 3:03 PM Free Editor associa... 155 KB
jmap.exe 12/8/2014 3:03 PM Application 17 KB
jmc.exe 12/8/2014 3:03 PM Application 315 KB
jmc.ini 12/8/2014 3:03 PM Configuration sett... 1 KB
jps.exe 12/8/2014 3:03 PM Application 16 KB
52 items

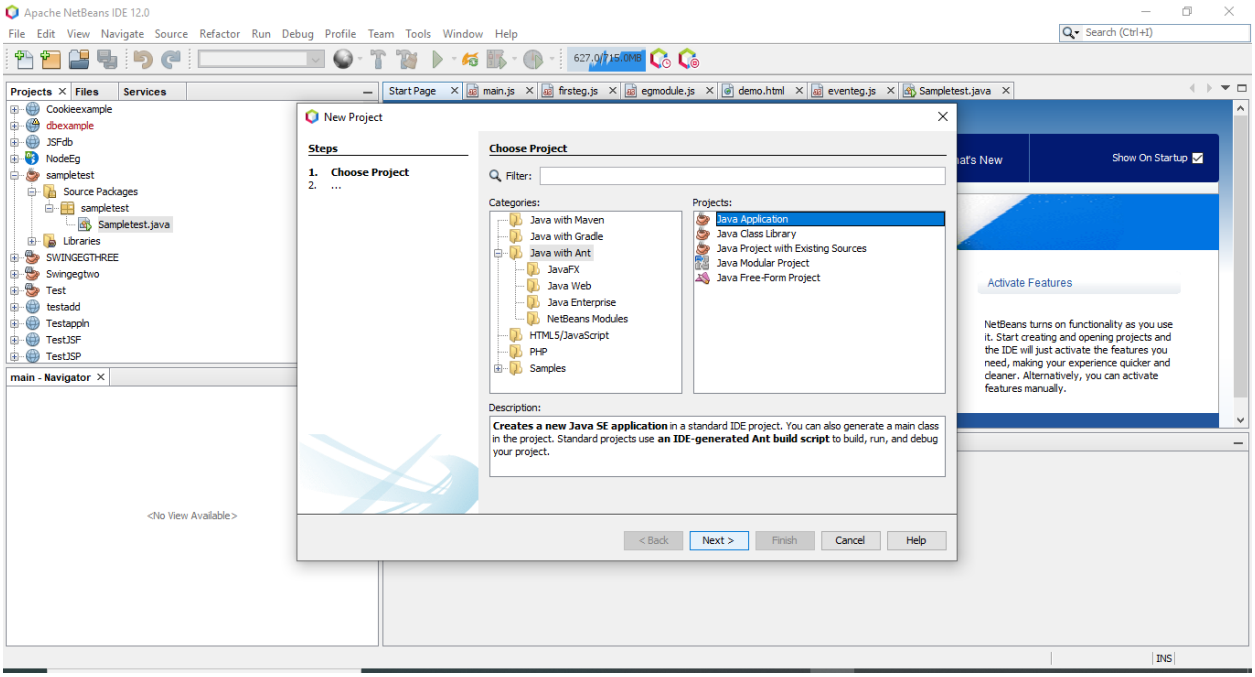

Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\admin>cd\..
C:\>set path="C:\Program Files\Java\jdk1.7.0_71\bin";
C:\>javac
Usage: javac <options> <source files>
where possible options include:
-g Generate all debugging info
-g:none Generate no debugging info
-g:{lines,vars,source} Generate only some debugging info
-nowarn Generate no warnings
-verbose Output messages about what the compiler is doing
-deprecation Output source locations where deprecated APIs are u
sed
-classpath <path> Specify where to find user class files and annotati
on processors
-cp <path> Specify where to find user class files and annotati
on processors
-sourcepath <path> Specify where to find input source files
-bootclasspath <path> Override location of bootstrap class files
-extdirs <dirs> Override location of installed extensions
-endorseddirs <dirs> Override location of endorsed standards path
-proc:{none,only} Control whether annotation processing and/or compil
ation is done.
-processor <class1>[,<class2>,<class3>...] Names of the annotation processors
to run; bypasses default discovery process
-processorpath <path> Specify where to find annotation processors
-d <directory> Specify where to place generated class files
-s <directory> Specify where to place generated source files
-implicit:{none,class} Specify whether or not to generate class files for
implicitly referenced files
-encoding <encoding> Specify character encoding used by source files
-source <release> Provide source compatibility with specified release
-target <release> Generate class files for specific VM version
-version Version information
-help Print a synopsis of standard options
-Akey[=value] Options to pass to annotation processors
-X Print a synopsis of nonstandard options
-J<flag> Pass <flag> directly to the runtime system
-Werror Terminate compilation if warnings occur

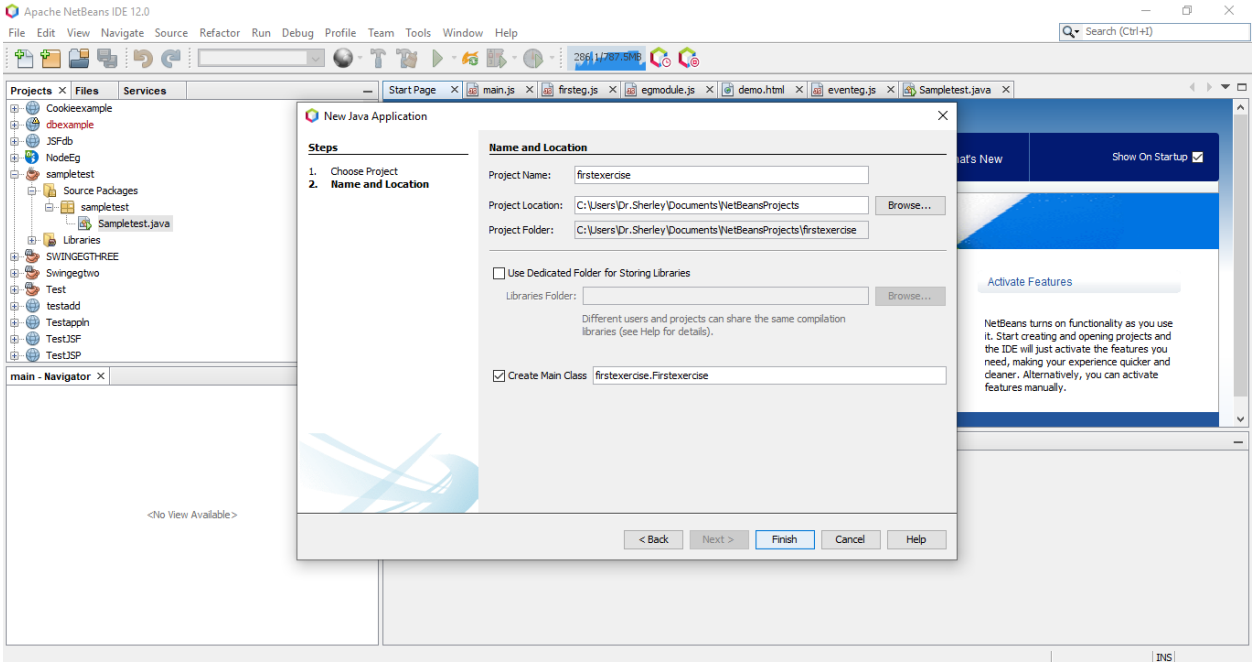
OR

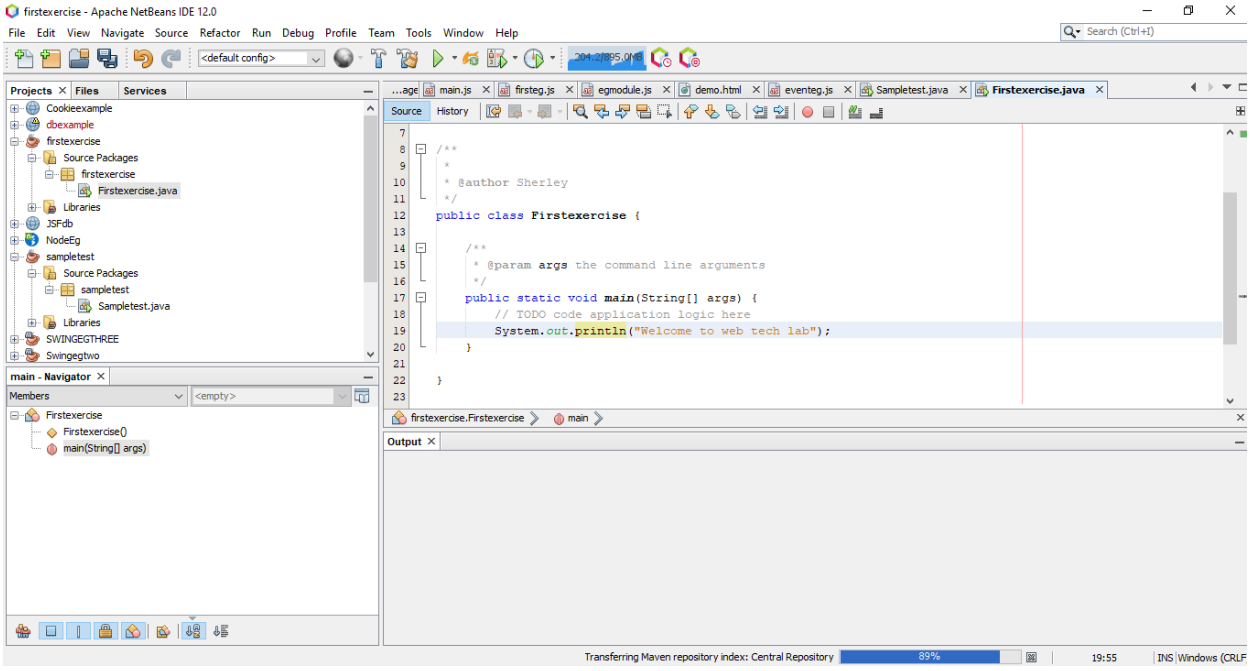

Control Panel Home
Device Manager
Remote settings
System protection
Advanced system settings
System Properties
Computer Name
Hardware
Advanced
System Protection
Remote
You must be logged on as an Administrator to make most of these changes.
Performance
Visual effects, processor scheduling, memory usage, and virtual memory
Settings...
User Profiles
Desktop settings related to your logon
Settings...
Startup and Recovery
System startup, system failure, and debugging information
Settings...
Environment Variables...
OK
Cancel
Apply
Environment Variables
User variables for admin
Variable
Value
CLASSPATH
C:\Program Files\Apache Software Fou...
JAVA_HOME
C:\Program Files\Java\jdk1.7.0_71
TEMP
%USERPROFILE%\AppData\Local\Temp
TMP
%USERPROFILE%\AppData\Local\Temp
New...
Edit...
Delete
New User Variable
Variable name:
path
Variable value:
C:\Program Files\Java\jdk1.7.0_71\bin
OK
Cancel
OK
Cancel
Change settings
Computer description:
Workgroup:
WORKGROUP

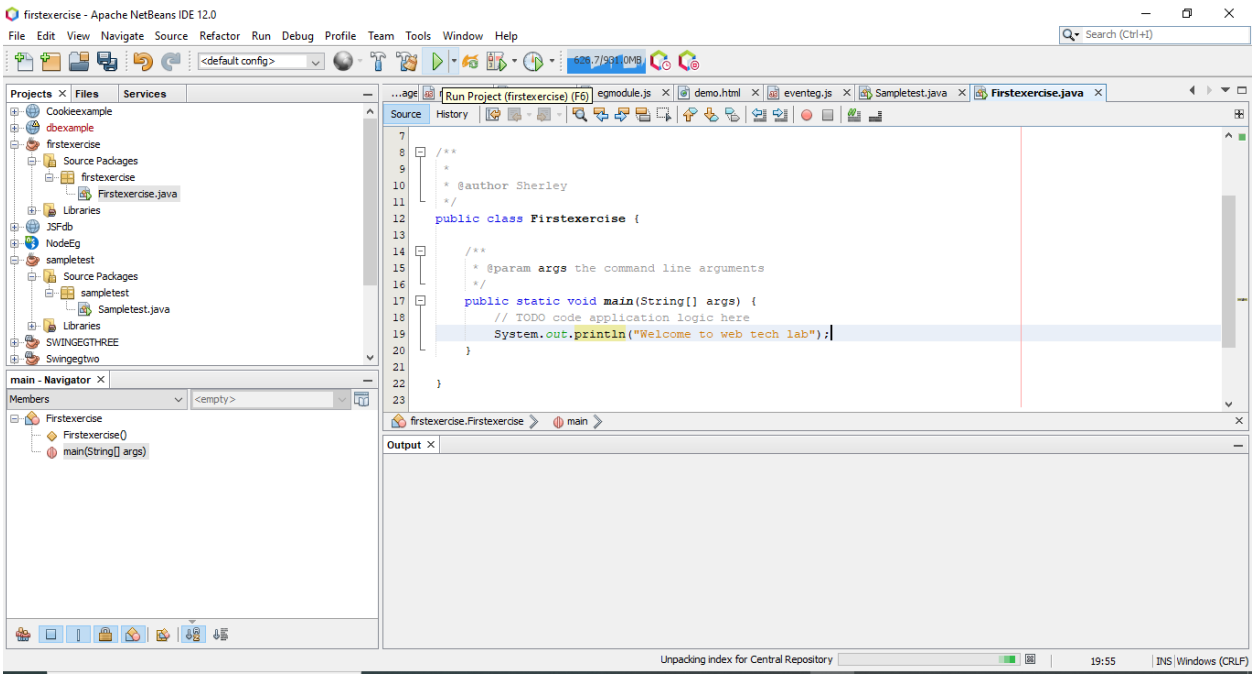

Apache NetBeans IDE 12.0
File
Edit
View
Navigate
Source
Refactor
Run
Debug
Profile
Team
Tools
Window
Help
New Project... Ctrl+Shift+N
New File... Ctrl+N
Open Project... Ctrl+Shift+O
Open Recent Project
Close Project
Close Other Projects
Close All Projects
Open File...
Open Recent File
Project Groups...
Project Properties
Import Project
Export Project
Save Ctrl+S
Save As...
Save All Ctrl+Shift+S
Page Setup...
Print... Ctrl+Alt+Shift+P
Print to HTML...
Exit
<No View Available>
Start Page
main.js
firsteg.js
egmodule.js
demo.html
eventeg.js
Sampletest.java
Apache NetBeans IDE
Learn & Discover
My NetBeans
What's New
Show On Startup
My NetBeans
Recent Projects
<no recent project>
Install Plugins
Add support for other languages and technologies by installing plugins from the NetBeans Update Center.
Activate Features
NetBeans turns on functionality as you use it. Start creating and opening projects and the IDE will just activate the features you need, making your experience quicker and cleaner. Alternatively, you can activate features manually.
Output
Background scanning of projects...
55%
INS

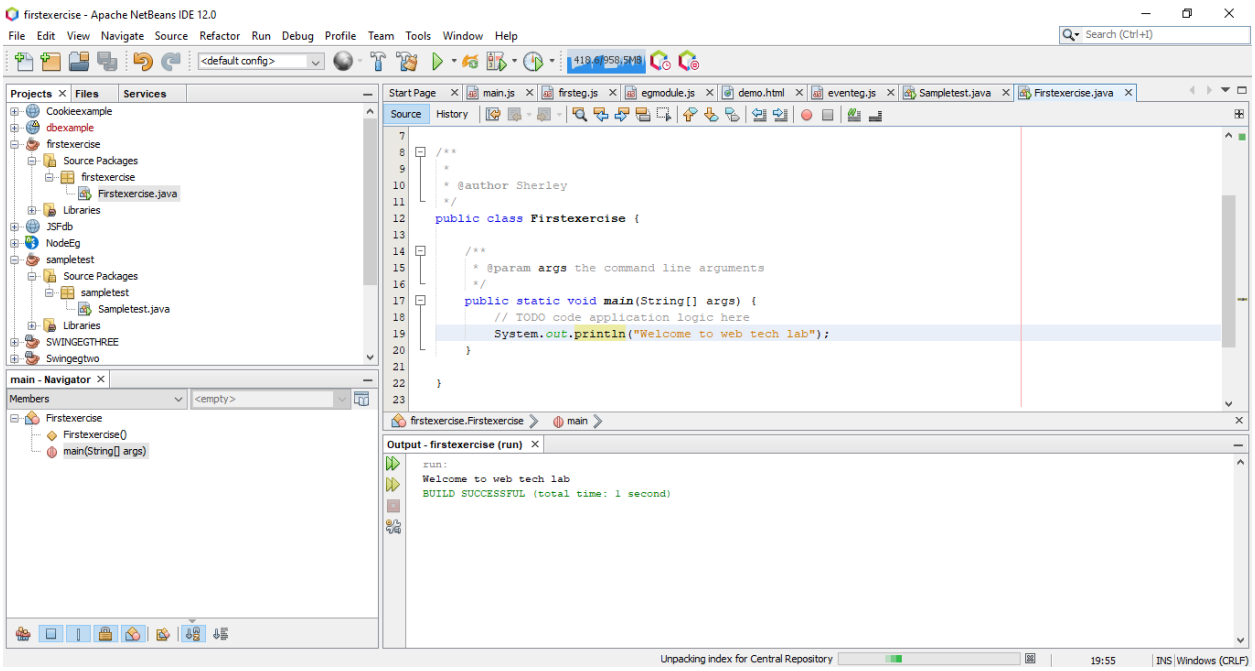

Apache NetBeans IDE 12.0
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Files Services
Start Page main.js firsteg.js egmodule.js demo.html eventeg.js Sampletest.java
Cookieexample
dbexample
JSFdb
NodeEg
sampletest
Source Packages
sampletest
Sampletest.java
Libraries
SWINGEGTHREE
Swingegtwo
Test
testadd
Testappln
TestJSF
TestJSP
main - Navigator
<No View Available>
New Project
Steps
1. Choose Project
2. ...
Choose Project
Filter:
Categories:
Java with Maven
Java with Gradle
Java with Ant
JavaFX
Java Web
Java Enterprise
NetBeans Modules
HTML5/JavaScript
PHP
Samples
Projects:
Java Application
Java Class Library
Java Project with Existing Sources
Java Modular Project
Java Free-Form Project
Description:
Creates a new Java SE application in a standard IDE project. You can also generate a main class in the project. Standard projects use an IDE-generated Ant build script to build, run, and debug your project.
< Back
Next >
Finish
Cancel
Help
Show On Startup
Activate Features
NetBeans turns on functionality as you use it. Start creating and opening projects and the IDE will just activate the features you need, making your experience quicker and cleaner. Alternatively, you can activate features manually.


Apache NetBeans IDE 12.0
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Files Services
Start Page main.js firsteg.js egmodule.js demo.html eventeg.js Sampletest.java
Cookieexample
dbexample
JSFdb
NodeEg
sampletest
Source Packages
sampletest
Sampletest.java
Libraries
SWINGEGTHREE
Swingegtwo
Test
testadd
Testappln
TestJSF
TestJSP
main - Navigator
<No View Available>
New Project
Steps
1. Choose Project
2. ...
Choose Project
Filter:
Categories:
Java with Maven
Java with Gradle
Java with Ant
JavaFX
Java Web
Java Enterprise
NetBeans Modules
HTML5/JavaScript
PHP
Samples
Projects:
Java Application
Java Class Library
Java Project with Existing Sources
Java Modular Project
Java Free-Form Project
Description:
Creates a new Java SE application in a standard IDE project. You can also generate a main class in the project. Standard projects use an IDE-generated Ant build script to build, run, and debug your project.
< Back
Next >
Finish
Cancel
Help
Show On Startup
Activate Features
NetBeans turns on functionality as you use it. Start creating and opening projects and the IDE will just activate the features you need, making your experience quicker and cleaner. Alternatively, you can activate features manually.
INS


Apache NetBeans IDE 12.0
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
Projects Files Services
Cookieexample
dbexample
JSFdb
NodeEg
sampletest
Source Packages
sampletest
Sampletest.java
Libraries
SWINGEGTHREE
Swingegtwo
Test
testadd
Testappln
TestJSF
TestJSP
main - Navigator
<No View Available>
Start Page
main.js
firsteg.js
egmodule.js
demo.html
eventeg.js
Sampletest.java
New Java Application
Steps
1. Choose Project
2. Name and Location
Name and Location
Project Name: firstexercise
Project Location: C:\Users\Dr.Sherley\Documents\NetBeansProjects
Browse...
Project Folder: C:\Users\Dr.Sherley\Documents\NetBeansProjects\firstexercise
Use Dedicated Folder for Storing Libraries
Libraries Folder:
Browse...
Different users and projects can share the same compilation libraries (see Help for details).
Create Main Class firstexercise.Firstexercise
< Back
Next >
Finish
Cancel
Help
Show On Startup
Activate Features
NetBeans turns on functionality as you use it. Start creating and opening projects and the IDE will just activate the features you need, making your experience quicker and cleaner. Alternatively, you can activate features manually.
INS


firstexercise - Apache NetBeans IDE 12.0
File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
Search (Ctrl+I)
<default config>
Projects Files Services
Cookieexample
dbexample
firstexercise
Source Packages
firstexercise
Firstexercise.java
Libraries
JSFdb
NodeEg
sampletest
Source Packages
sampletest
Sampletest.java
Libraries
SWINGEGTHREE
Swingegtwo
main - Navigator
Members
<empty>
Firstexercise
Firstexercise()
main(String[] args)
main.js
firsteg.js
egmodule.js
demo.html
eventeg.js
Sampletest.java
Firstexercise.java
Source
History
/**
*
* @author Sherley
*/
public class Firstexercise {
/**
* @param args the command line arguments
*/
public static void main(String[] args) {
// TODO code application logic here
System.out.println("Welcome to web tech lab");
}
}
firstexercise.Firstexercise
main
Output
Transferring Maven repository index: Central Repository
89%
19:55
INS Windows (CRLF





Basic programs:

class FibonacciExample1{
public static void main(String args[])
{

```
int n1=0,n2=1,n3,i,count=10;
System.out.print(n1+" "+n2);//printing 0 and 1
for(i=2;i<count;++i) {
n3=n1+n2;
System.out.print(" "+n3);
n1=n2;
n2=n3;
}
}}
```

Syntax for Declaring Class:

<AccessModifier>class<Class_Name>

```
class Student1{
int id;
String name;
public static void main(String args[]){

Student1 s1=new Student1();
System.out.println(s1.id);
System.out.println(s1.name);
}
}
```

Objects:

Objects have states and behaviors. Example: A dog has states - color, name, breed as well as behaviors -wagging, barking, eating. An object is an instance of a class

An object has three characteristics:

- **State :** represents data (value) of an object.
- **Behavior :** represents the behavior (functionality) of an object such as deposit, withdraw etc.
- **Identity :** Object identity is typically implemented via a unique ID. The value of the ID is not visible to the external user. But,it is used internally by the JVM to identify each object uniquely.

Syntax:

<Class_Name>ClassObjectReference = new <Class_Name>();

How to Access Member of a Class:
You call a method of an object by naming the object followed by a period (dot), this should be followed by the name of the method and its argument list.
Syntax :

objectName.methodName(arg1, arg2, arg3).

Example

```
class Student2{
int rollno;
String name;
Void insertRecord(int r, String n){ //method
rollno=r;

name=n;
}
Void displayInformation(){
System.out.println(rollno+" "+name);
}//method
public static void main(String args[]){
Student2 s1=new Student2();
Student2 s2=new Student2();
s1.insertRecord(111,"Karan");
s2.insertRecord(222,"Aryan");
s1.displayInformation();

s2.displayInformation();
}
}
```

IT5512- WEB TECHNOLOGIES LAB-SESSION-1

DATE: 17/8/22 FN

BASIC JAVA PROGRAMS

1. Write a java program to display Fibonacci series
2. Write a java program to check whether a number is prime or not
3. Write a java program to check whether a number is palindrome or not.
4. Write a program to find a factorial of a number
5. write a program to find sum of all integers greater than 100 and less than 200 that are divisible by 3
6. Write a program to print even numbers between 1 to 50
7. Write a program to display the student details.
8. Write a java program with a class bankaccount with the following methods
   Credit
   Debit
   Display

IT5512- WEB TECHNOLOGIES LAB-SESSION-2

DATE: 24/08/22 FN

BASIC JAVA PROGRAMS-II

Note: By getting input from user (Dynamic input through command prompt) do the following programs:

1. Write a java program to implement the calculator functionalities.
2. Write a java program to reverse a number.
3. Write a program to find a factorial of a number in recursion.
4. Write a java program to calculate the area of the following:
    i. Square
    ii. rectangle
5. Write a java program to find the 5^{th} largest and 3^{rd} smallest element in an array.
6. Write a java program to do
    i. Matrix addition
    ii. Matrix multiplication
    iii. Transpose of the given matrix
7. Write a java program to copy a subset of array elements to another array.
8. Write a Java program to calculate Permutation and Combination of 2 numbers.
9. Write a program to enter the values of two variables 'a' and 'b' from keyboard and then check if both the conditions 'a < 100' and 'a > b' are true.
10. Write a java program with a class LibraryBooks with the following methods
    InsertBook
    BorrowBook
    Display

IT5512- WEB TECHNOLOGIES LAB-SESSION-3

DATE: 07/9/22 FN

CONSTRUCTOR, METHOD OVERLOADING, ARRAY OF OBJECTS

1. Write a program to compute perimeter of class Circle, Rectangle, Square using parameterized constructor.
2. Write a program to design a class Volume and then find out the volume of a Cube, Cylinder and Sphere using method overloading.
3. Write a java class which consists of 5 integer data. Overload constructor (Default & parameterized) to initialize those integer data members. Write a method which sorts those integer data members using insertion sort.
4. Suppose you have a money box with an initial amount of Rs.500 and you have to add some more amount to it. Create a class "AddAmount" with a data member named "amount" with an initial value of Rs.500. Now create two constructors of this class as follows:
    a. Without any parameter- no amount will be added to the money box
    b. Having a parameter which is the amount that will be added to money box

    Create an object of the "AddAmount" class and display the final amount in money box
5. Create a class to print an integer and a character with two methods having the same name but different sequence of the integer and the character parameters. For example, if the parameters of the first method are of the form (int n, char c), then that of the second method will be of the form (char c, int n).
6. Write a program to print the name, salary and date of joining of 10 employees in a company (Note: Use array of objects.)

IT5512- WEB TECHNOLOGY LAB-SESSION-4

DATE: 10/09/22 FN

STATIC, THIS, ARRAYS, STRING CLASS

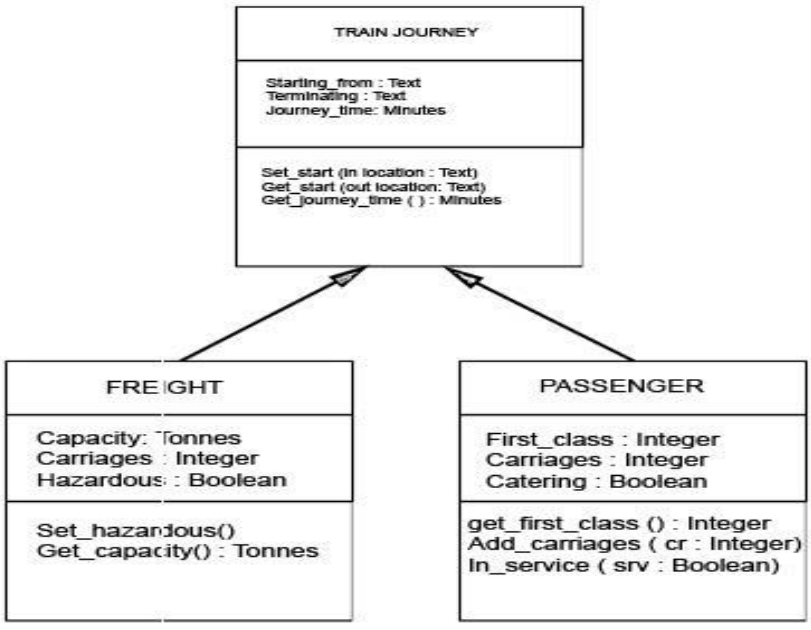
1. Write a java program to perform arithmetic (addition, subtraction, multiplication, division, modulo) operations using static members.
2. Write a Java program with a class BankAccount with the following methods
   Credit
   Debit
   Display
   And also illustrate the use of **this** keyword for the above scenario.
3. Write a Java program to store the marks of the student in an array and using Arrays Class methods (sort,fill,Search,equals) perform the manipulations.
4. Write a program to display complex number using constructor overloading, and also perform simple arithmetic operation with complex numbers using **this** keyword along with the variables.
5. Write a program to implement library management with static methods, static variables and static blocks.
6. Write a Java program to create a string object. Initialize this object with your name. Find the length of your name using appropriate method. Find the 1st character of your name and find the number of time the character appears in your name.
7. Write program in Java for String handling (StringBuffer, StringBuilder) which performs the following:
   i. Checks the capacity.
   ii. Reverse the contents of a string.
   iii. Convert the string in upper case/lower case.
   iv. Read a string from user and append it.

IT5512- WEB TECHNOLOGY LAB-SESSION-5

DATE: 14/09/22 FN

INHERITANCE, SUPER, FINAL, ARRAYLIST

1. Create a class named 'Member' having the following members: Data members
   1 - Name
   2 - Age
   3 - Phone number
   4 - Address
   5 – Salary
   It also has a method named 'printSalary' which prints the salary of the members.
   Two classes 'Employee' and 'Manager' inherits the 'Member' class. The 'Employee' and 'Manager' classes have data members 'specialization' and 'department' respectively. Now, assign name, age, phone number, address and salary to an employee and a manager by making an object of both of these classes and print the same. (Note: Use all access specifier)
2. Create a class country, state, city and village. Arrange these classes in hierarchical manner.
3. Declare a class of vehicle. Derived classes are two-wheeler, three-wheeler and four-wheeler. Display the properties of each type of vehicle using member function of class.
4. Write a Java program to implement the following scenario with these keywords/concepts listed below: i.) this ii.)super iii.)final iv.)Access Modifier v.) static



5. Write a java program to store details of student and using ArrayList class methods (add,remove,addall,remove,contains,size,get) do the necessary manipulations.

6. Write a method reverse that reverses the order of the elements in an ArrayList of strings. Write a method capitalizePlurals that accepts an ArrayList of strings and replaces every word ending with an "s" with its uppercased version. Write a method removePlurals that accepts an ArrayList of strings and removes every word in the list ending with an "s", case-insensitively.

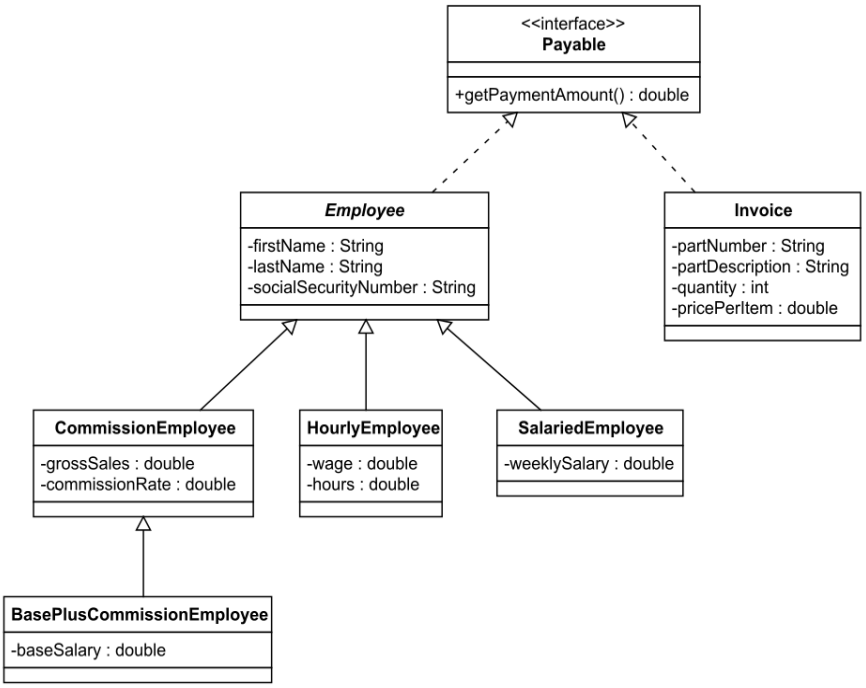
7. Write a program that reads a numbers from ArrayList and displays all the numbers as a list, then: a. Prints the average of the numbers. b. Prints the highest and lowest number. c. Filters out all of the even numbers (ones divisible by 2).

IT5512- WEB TECHNOLOGY LAB-SESSION-6

DATE: 21/09/22 FN

INTERFACE, ABSTRACT, POLYMORPHISM, REGULAR EXPRESSION

1. Write a Java program to implement the following specified in the picture using inheritance, interface concepts and calculate the salary of an employee. Use super keyword , access modifiers



2. We have to calculate the percentage of marks obtained in three subjects (each out of 100) by student A and in four subjects (each out of 100) by student B. Create an abstract class 'Marks' with an abstract method 'getPercentage'. It is inherited by two other classes 'A' and 'B' each having a method with the same name which returns the percentage of the students. The constructor of student A takes the marks in three subjects as its parameters and the marks in four subjects as its parameters for student B. Create an object for each of the two classes and print the percentage of marks for both the students.

3. Write a program OnlinebookShop which sells and then add Technical Book and Non-Technical book as subclasses of the Book class which holds the details about book name, publisher, Published year, edition and price. Implement the polymorphic behavior through overriding methods. Explore the usage of Upcasting and Downcasting also.

4. Write a java program for registering the details of jobseeker. The requirements are mentioned below.

i. username should always end with _job and there should be atleast minimum of characters to the left of _job.

ii. Validate the emaild provided by the user.

iii. Password should accept only characters and numbers.

5. An company requires each employee to maintain a secret code. The secret code needs to pass certain validation for getting accepted. The validation rules are given as follows:

i. The secret code should be six characters long

ii. The first three characters should be cod

iii. There should be at least one digit in code (use isDigit)

iv. The first character should always be an upper case letter (Use isUpperCase)

v. The code should contain only alphabets and digits

Return true if the above validation is passed.

IT5512- WEB TECHNOLOGY LAB-SESSION-7

DATE: 28/09/22 FN

EXCEPTION HANDLING

1. Develop a Java Console application to design a Vending Machine which follows following requirements
    1. Accepts coins of ₹1, ₹5, ₹10, ₹25, ₹50
    2. Allows user to select products (Chocolate(10), Snack(25), Nuts(50), Juice(20))
    3. Allow user to take refund by cancelling the request
    4. Return selected product and remaining change, if any
    5. Allow reset operation for vending machine supplier

    Use *Interface, Inheritance, Constructor, abstract class, polymorphism, exception (Unchecked Exception, checked Exception, Custom Exception (NotPaidFullAmoutException, NoSufficientChangeException, SoldOutException))* concepts and also use *static, final and this keyword* wherever applicable to design a java application.

2. Calculate EMI for personal loan of Rs100000/- with the rate of interest:13% for a total of 3 years, if there is no balance in the account to pay an EMI raise a custom exception also use try catch finally mechanism.

IT5512- WEB TECHNOLOGY LAB-SESSION-8

DATE: 12/10/22 FN

INPUT AND OUTPUT MANIPULATION ON FILES, SERIALIZATION

1. Write a java program using byte streams to read a text file and makes an alphabetical list of all the words in that file. Those list of words is written to another file. Improve the program so that it also keeps track of the number of times that each word occurs in the file. Two lists should be displayed in the output file. The first list contains the words in alphabetical order. The number of times that the word occurred in the file should be listed along with the word. Then write a second list to the output file in which the words are sorted according to the number of times that they occurred in the files. The word that occurred most often should be listed first.
2. Write a java program to have country class and serialize country name and continent name to which the country belongs to. You don't want to serialize population attribute as it will change with time, so declare population as transient. Perform deserialization, Print country name, continent name and population of the country.
3. Write a Java program using character stream classes that copies one file content to another, replacing all lower characters by their upper case equivalents.

IT5512- WEB TECHNOLOGY LAB-SESSION-9

DATE: 12/10/22 FN

CLIENT-SERVER NETWORK APPLICATION USING JAVA SOCKETS

1. Write a java program to simulate chatbot application which does two way communication between client and server using connection oriented protocol.
2. Write a java program to perform two way communication between client and server where message sent by client are converted to upper case and displayed in server side, message sent by server should be converted to lower case and displayed in client side. Implement the scenario using connectionless protocol.

IT5512- WEB TECHNOLOGY LAB-SESSION-10

DATE: 26/10/22 FN

MULTITHREADING

1. Write a Java program that creates three threads. First thread displays “Hello!” every one second, the second thread displays “Wear Mask !” every two seconds and “Use Sanitizer !” every 5 seconds

2. Write a Java program to create five threads with different priorities. Send two threads of the highest priority to sleep state. Check the aliveness of the threads and mark which thread is long lasting.

3. Write a java program that implements a multi-thread applications that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the thread will print the value of the number

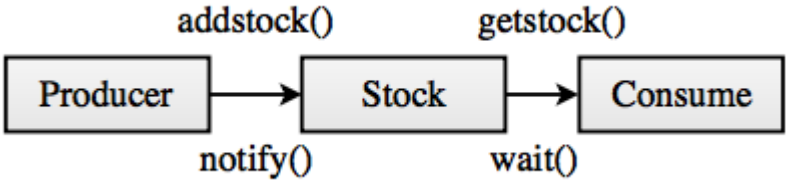
4. Create an application that executes two threads. First thread displays the alphabets A to Z at every one second. The second thread will display the alphabets Z to A at every two seconds. Both the threads need to synchronize with each other for printing alphabets. The second thread has to wait until the first thread finishes its execution. The application waits for all thread to finish the execution.

IT5512- WEB TECHNOLOGY LAB-SESSION-11

DATE: 29/10/22 FN

INTERTHREAD COMMUNICATION

1. Write a Java program that implements interthread communication for the following scenario:



IT5512- WEB TECHNOLOGY LAB-SESSION-12

DATE: 29/10/22 FN

DYNAMIC WEB PAGE CREATION USING JAVASCRIPT

2. Design a web page for online shopping store. The website should consist the following pages.
    - Registration and user Login
    - User Profile Page
    - Product catalog
    - Shopping Cart
    - Payment
    - Order Conformation

   Create web page which validates the registration and user login using javascript. When product catalog is viewed, the product can be zoomed in or zoomed out to know about the product in detail. User profile page can include details about user with few personal details to be displayed. When product is chosen for shopping based on the quantity specified, display the price of the product and in payment page validate the details using javascript. Once order is confirmed display the details about order and estimated date by which the product will be delivered to the user.

   Note: Database connectivity is not needed.

IT5512- WEB TECHNOLOGY LAB-SESSION-13

DATE: 9/11/22 FN

DYNAMIC WEB PAGE CREATION USING JQUERY

1. Create html page which has contents to be displayed using <p> and tag. When these html elements are clicked hide the contents. Implement this using jquery library.
2. Change the background color of the element of the following code on clicking the button.
3. Using jquery Set background color of an element when the element (or any elements inside it) gets focus or loses focus.
4. Write jQuery code to append a div element (and all of its contents) dynamically to the body element.
5. Create one textarea and one button. On click of the button the length of text entered inside the textarea will be displayed.
6. Create two textboxes and one button with + on it. On click of the button you should display sum of the two entered numbers in textbox. Similarly add Subtract, Multiple and Division buttons.
7. Using html and jquery , Create one button and a textbox. On click of the button the text written in text box should display on the button.
8. Build a list page where users can add and rate examples from a category (e.g. movies, albums, or sports). This page should include the following:

    - A form, where you can add something to the list and rate it.
    - A table of all of the things you've added.
    - A delete button for each row of the table that lets you remove elements from the list.
    - Additional feature: a sorting feature, so you can sort entries in the table by their title or their rating. (use sort method of jquery)

IT5512- WEB TECHNOLOGY LAB-SESSION-14

DATE: 16/11/22 FN

DYNAMIC WEB PAGE CREATION USING AJAX

1. Consider the following json file about quiz question. Use AJAX with JSON and display details about Question, options and correct answer.

```
{
    "quiz": {
        "sport": {
            "q1": {
                "question": "Which one is correct team name in
NBA?",
                "options": [
                    "New York Bulls",
                    "Los Angeles Kings",
                    "Golden State Warriros",
                    "Huston Rocket"
                ],
                "answer": "Huston Rocket"
            },
            "status": "BLOCK"
        },
        "maths": {
            "q1": {
                "question": "5   7 = ?",
                "options": [
                    "10",
                    "11",
                    "12",
                    "13"
                ],
                "answer": "12"
            },
            "q2": {
                "question": "12 - 8 = ?",
                "options": [
                    "1",
                    "2",
                    "3",
                    "4"
                ],
                "answer": "4"
            },
            "status": "PASS"
```

```
            }
        }
}
```

2. Load XML file with AJAX and retrieve the Food name, price and its description from the following XML file

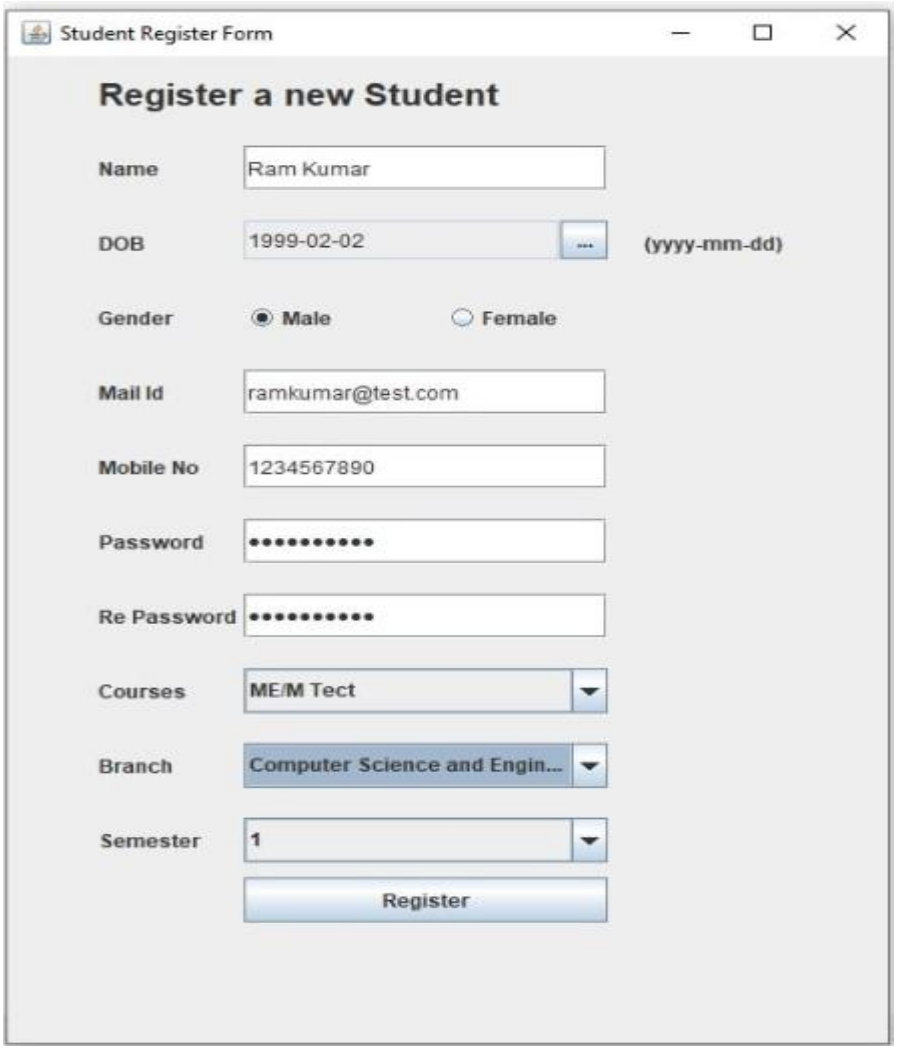
```
<?xml version="1.0" encoding="UTF-8"?>
<!-- This document is a breakfast menu for a cafe, written in XML. -->
<!-- Source: http://www.w3schools.com/xml/ -->
<menu>
<food>
<name>Belgian Waffles</name>
<price>£5.95</price>
<description>
Our famous Belgian Waffles with plenty of real maple syrup.
</description>
</food>
<food>
<name>Strawberry Belgian Waffles</name>
<price>£7.95</price>
<description>
Light Belgian waffles covered with strawberries and whipped cream.
</description>
</food>
<food>
<name>Homestyle Breakfast</name>
<price>£6.95</price>
<description>
Two eggs, bacon, sausage, toast, and our ever-popular hash browns.
</description>
</food>
</menu>
```

IT5512- WEB TECHNOLOGY LAB-SESSION-15

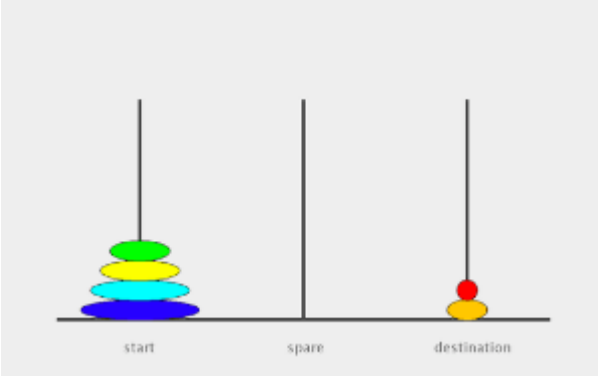
DATE: 23/11/22 FN

SIMPLE GUI APPLICATION DEVELOPMENT USING SWING

1. Implement the following form using Java Swing and display the contents in another form.



2. Write a program to simulate Towers of Hanoi using Java Swing.



IT5512- WEB TECHNOLOGY LAB-SESSION-16

DATE: 30/11/22 FN

ANDROID APPLICATION

1. Implement an E-Campus application for MIT using android.

Application Functionality:

- Information about campus infrastructure and details about different departments
- Information about campus recent activities and academic achievements
- Use Events (eg. select a department from the list which in turn will display detailed information about each department). (Include image,audio,Video, ,maps) wherever necessary.

IT5512- WEB TECHNOLOGY LAB-SESSION-17

DATE: 30/11/22 FN

SERVLET APPLICATION WITH JDBC ACCESS

1. Develop a web application to implement Employee management system, design the HTML form which allows new employee to register, once registered successfully display profile- information about an employee from the database. Use Servlet with JDBC (MySQL) connection and also include maintain the session details of an employee until they sign out from web application.

   Note: employee database should include *employee_details(Employeeno, Employeename, email, phoneno, department, designation, location)*

IT5512- WEB TECHNOLOGY LAB-SESSION-18

DATE: 07/12/22 FN

JSP

1. Create a catalogue page containing the book's details like: Book name, authors, description, price, publisher and an Add to Cart button. Also create a cart page which shows details like: book name, price, quantity, amount and total amount to be paid. Using JSP display the content in the cart page dynamically by retrieving the data from catalogue page with sessions.

IT5512- WEB TECHNOLOGY LAB-SESSION-19

DATE: 07/12/22 FN

JSF BASED WEB APPLICATION WITH JDBC ACCESS

1. Using JSF create a web application using UI components and database connectivity for the following scenario. In the inventory database you can find all options for composing a salad. Print the choices for composing a salad. Compute the salad price. The price is simply the sum of the prices of all ingredients. Create an empty shopping basket, add and remove a salad, calculate the total price for all salads in the shopping basket.

IT5512- WEB TECHNOLOGY LAB-SESSION-20

DATE: 14/12/22 FN

NODE JAVASCRIPT FUNCTIONS

1. Using Node JS read contents from any type of file(Text/html/doc) and display it using server functions.
2. Create a user defined module using Node JS to display current date and time and import the module and display it using server functions.

IT5512- WEB TECHNOLOGY LAB-SESSION-20

DATE: 14/12/22 FN

CLOUD BASED WEB APPLICATION

1. Deploy any web application created using Servlet/JSF/JSP in cloud. Mention the steps involved in Cloud deployment.