Phase 1

11-07-2022

Day 1

Html, css, js, react js ----🡪 React Native

Android

Angular Ionic framework

Day 2 : 12-07-2022

Day 3 : 13-07-2022

Git is a open source sub version control tool which help to record or track the flow of application Or project. It is use to share the code for one team to another team.

3 types of sub version control tool we can use

1. Local version control : RCS Revision control System
2. Central Version Control : SVN : Server and Client. In this version control we get only Remote repository (Remote location folder. Whey client to that repository). They push and pull.
3. Distributed Sub Version control : Git : In this type of tool we get local as well as remote repository.

Git is a distribution sub version control which provided a features local repository which help to connect remote repository ie GitHub, GitLab, AWS, Azure or any cloud remote repository.

Open the git terminal

git --version

git init : This command is use to make the folder as local repository

This command you have to execute only one time.

git status : this command is use to check the current status of local repository

This command execute again and again to check the current status of local repository.

git add filename :This command is use to move the file from local file system to staging area.

Or

git add . : this command is use to add more than one file or folder present in current location.

git commit –m “message1” This command is use to move file or folder from staging area to local repository.

14-07-2022 : Day 4

git branch : git branch is like a pointer which hold more than one commit details.

Git provide by default one branch and the name of the branch may be master or main.

git branch : This command is use to display all branches present in current folder.

git branch branchName : This command is use to create the branch

git checkout branchName : This command is use to move or switch from one branch to anther branch.

Or

git checkout –b branchName : This command is use to create the new branch and switch to that banch.

git merge branchName: This command is use to merge user-defined branch code to current rnach

git branch –D branchName : This command is use to delete the branch

git checkout –b branchname

remote repository

git hub, gitlab, any cloud vendor

please create own git hub account with your personal email id

git branch –m branchName : This command is use to rename the branch

git remote add origin URL This command is use to connect your local repository with remote repository. This command only once.

git push –u origin main This command is use to push the local repository code to remote.

git clone URL : it is use to download remote repository in local machine.

git pull : this command is use to get new update contents from remote repository to existing repository in local machine.

Java : Java is a platform independent and pure object oriented programming language.

Initial name of Java is Oak.

They rename to Java in Nov 1995.

Java developed by Games Josling and team.

It was part of sun micro system and belong to Oracle.

Version of Java

1. 18 version

Day 5:

18-07-2022

object : object is any real world entity. Object is a concept.

Properties or state-🡪 have -🡪 name,age, height, color etc 🡪 variables or fields etc.

Person

Behavior -🡪do/does -🡪 teaching, sleeping, talking, typing etc 🡪 functions or methods.

Bank

Animal

Wheel, price, color etc

Car

Start, appliedGear, moving, stop etc

Employee

Etc

class : blue print of object or template of object or it user-defined data types which is use to describe the object.

syntax of the class

class ClassName {

fields or variable

methods or functions

}

Pre-defined method ie main method and this method must be part of class.

Class name must be follow pascal naming rules.

If class contains one word first letter of class start with upper case like Demo, Test, Employee

If class contains more than one word each word first letter upper case, EmployeeDetails, ManagerInfo etc.

class Demo {

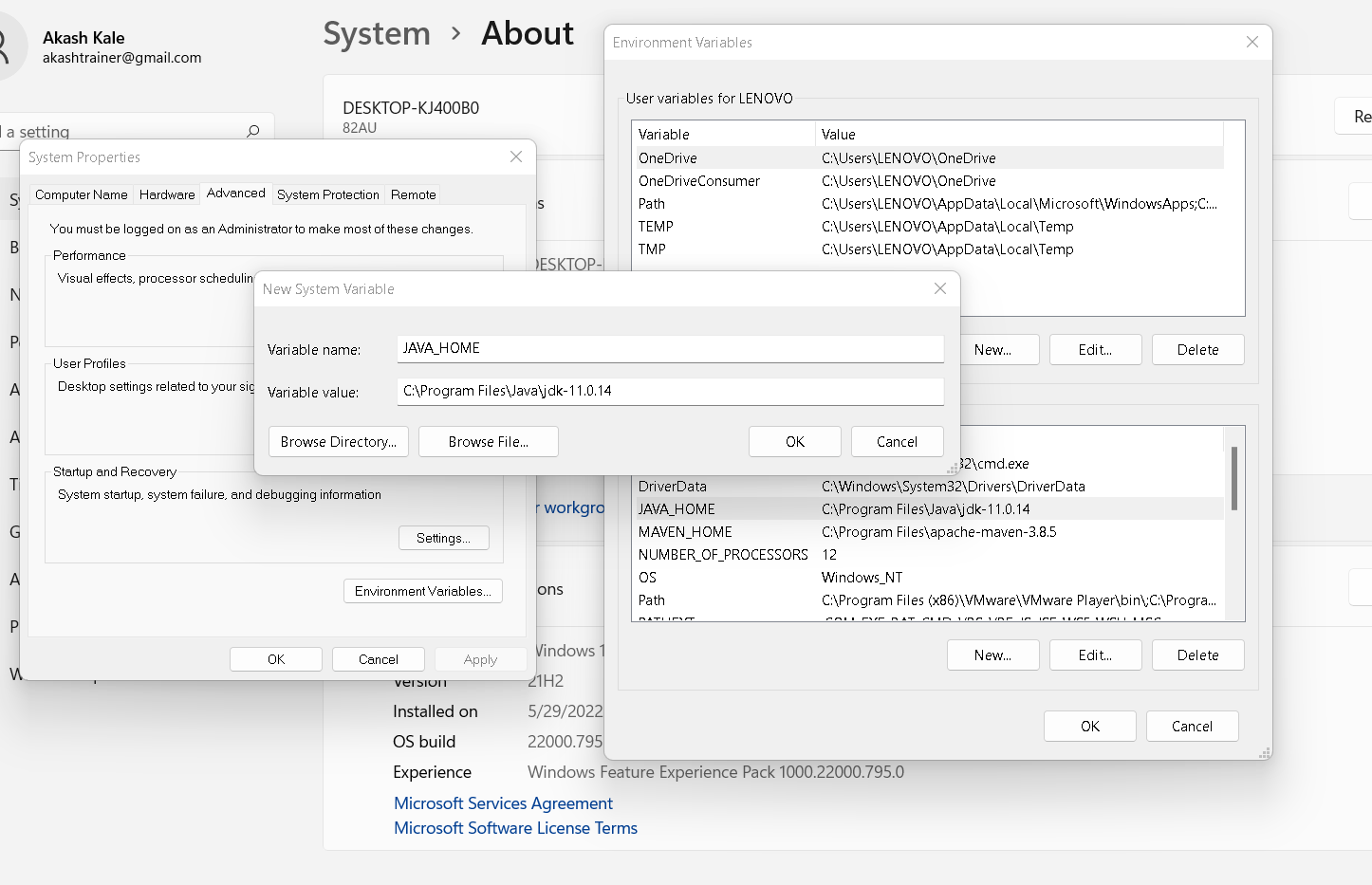
public static void main(String args[]) {

System.out.println(“Welcome to Java”);

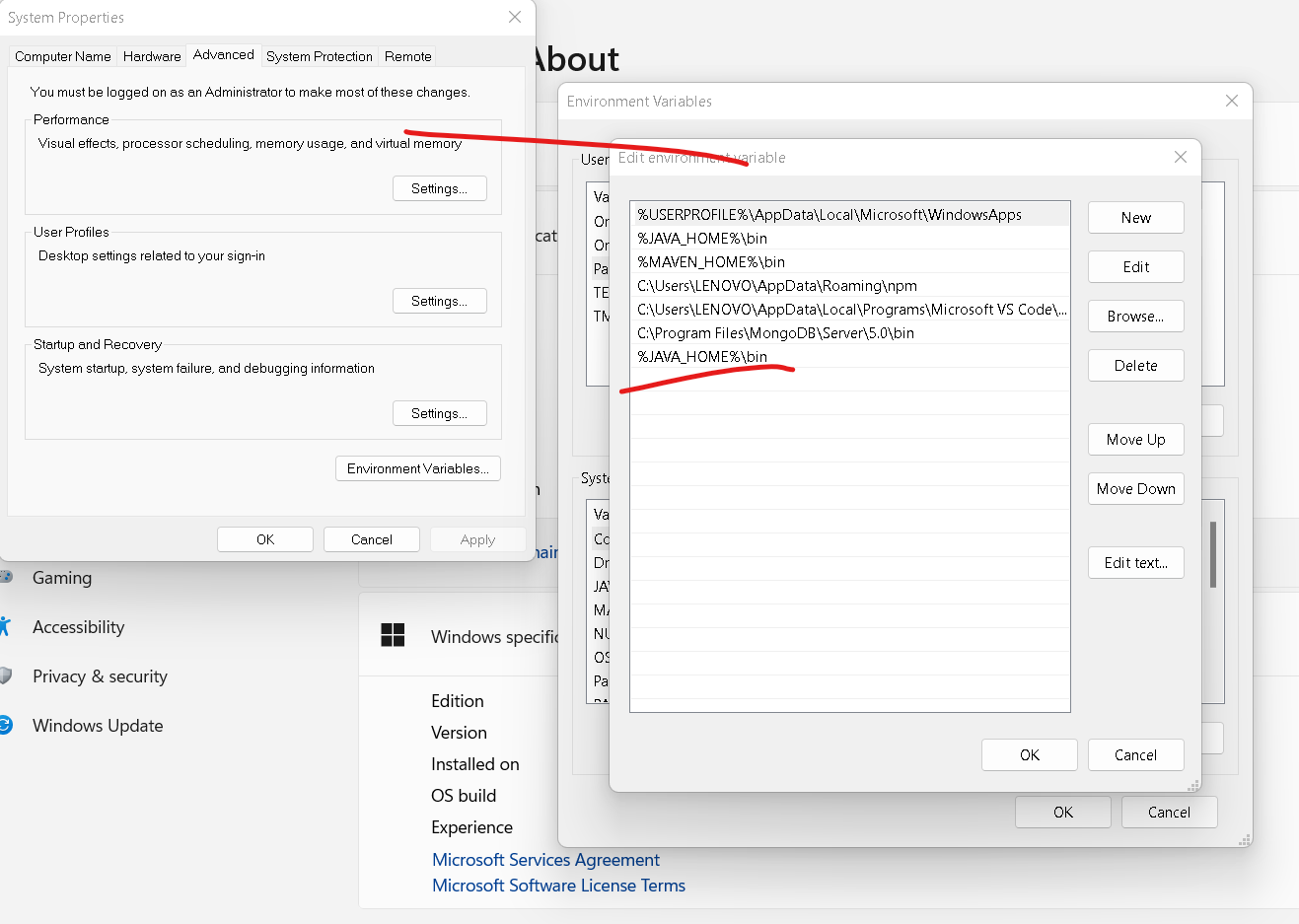
}

}

We have to save the program with className.java



Path



javac Demo.java : it is use to compile the program

java Demo : it is use to run the program

Demo.java

class Demo {

public static void main(String args[]) {

System.out.println("Welcome to Java ");

System.out.println("Welcome to Java once again");

System.out.print("Welcome again");

System.out.printf("Welcome to Java again\n");

}

}

Data types

It is a type of data which tells what type of data it can hold.

2 types of data types

1. Primitive data types : it is use to store only value

8 types of primitive data types

1. byte 1 byte
2. short 2 byte
3. int 4 byte
4. long : it is use to store the value without decimal. 8 byte
5. float 4 byte
6. double : it is use to store the value with decimal 8 byte
7. char : any single character 2 byte
8. boolean : true or false 1 bit

1. Non primitive data type or reference data type : it is use to store the value as well as reference of another data types.

class Demo {

public static void main(String args[]) {

int a;

int b=10;

System.out.println(b);

System.out.println("value of b is "+b);

System.out.printf("value of b is = %d\n",b);

}

}

Type casting : converting one data type to another data type is known as type casting.

2 types

1. Implicit type casting :
2. Explicit type casting :

Int family

--------🡪 implicit type casting -----🡪

byte short int long

🡨-- explicit type casting --------------

Implicit type casting

int float

Explicit type casting

Type casting example

class Demo {

public static void main(String args[]) {

/\*byte a=10;

short b=a; //implicit type casting

System.out.println(a);

System.out.println(b);

short c=10;

byte d =(byte)c; // explicit type casting

System.out.println(c);

System.out.println(d);\*/

//float x = 100.10; // error

//float x = (float)100.10;

//float x = 100.10f;

//double x = 100.10;

float x = 100.10f;

int y = (int)x; // explicit type casting

System.out.println(x);

System.out.println(y);

}

}

Operator

1. Arithmetic operator
2. Logical operator
3. Assignment operator
4. Conditional operator
5. Increment and decrement operator
6. Ternary operator

If statement

1. Simple if
2. If else
3. If else if
4. Switch statement : it I use to execute set of statement base upon user or programmer decision.

Syntax

switch(label) {

case v1: block1;

break;

case v2: block2;

break;

case v3: block3;

break;

default : wrongblock

break;

}

switch, case, break and default are keywords.

Switch statement program

class Demo {

public static void main(String args[]) {

int choice =10;

switch(choice) {

case 1:System.out.println("block1");

break;

case 2:System.out.println("block2");

break;

case 3:System.out.println("block3");

break;

default : System.out.println("Wrong choice");

break;

}

System.out.println("finish");

}

}

Taking the value through keyword in java

1. Using Scanner class.
2. Using DataInputStream class
3. BufferedReader class
4. Command line interface

Scanner : it is a pre defined class part of util package. Package is a collection of classes and interface.

Syntax to create the Scanner class object.

Scanner obj =new Scanner(System.in);

obj.nextInt();

obj.nextFloat();

obj.nextBoolean();

obj.next(); it is use to receive the string value. It is use to take only one word

obj.nextLine(); : it is use to take more than one word

looping

it is use to execute the task again and again till the condition become false.

while loop

do while loop

for loop

for each loop or enhanced loop : this type of loop we will use with array or collection of classes.

Non primitive or reference data type

1. array
2. class (it may be pre-defined or user-defined class)
3. interface (it may be pre-defined or user-defined)
4. enum

array : array is use to store more than value of same types.

Syntax

datatype arrayName[];

int abc[];

int a;

syntax of for each loop

for(datatype variableName: arrayName) {

}

Array declaration with initialization and display the value using for loop as well as for each loop

class Demo {

public static void main(String args[]) {

//int abc[10]; //valid in C or C++ but not in java

int abc[]; // valid in java

int xyz[]={10,20,30,40,50,60,100,200,140,670,80,90};

System.out.println("Value of 0 index position "+xyz[0]);

System.out.println("Value of 1 index position "+xyz[1]);

System.out.println("Size of the array is "+xyz.length);

System.out.println("Retrieve the value using for loop");

for(int i=4;i<xyz.length;i++) {

System.out.println(xyz[i]);

}

System.out.println("Retrieve the value using for each loop");

for(int n : xyz) {

System.out.println(n);

}

}

}

Memory creation of array

Syntax

datatype arrayName[]=new datatype[size];

int abc[]=new int[10]; here abc can hold 10 value of type int.

float xyz[]=new float[100]; here xyz can hold 100 value of type float.

String : In java String is a pre-defined class part of lang package. It is also known as reference data types. By default every java program import lang package.

Combination of more than one character enclosed in double quotes.

Syntax to create the String class object.

String str1 = “Welcome to Java Training”; // literal style

String str2 = new String(“Welcome to Java Training”); // creating using new keyword.

String class methods

import java.util.\*;

class Demo {

public static void main(String args[]) {

String str1 = "Welcome to Java Training";

String str2 = new String("Welcome to Java Training");

System.out.println(str1);

System.out.println(str2);

System.out.println(str1.length());

System.out.println(str2.length());

System.out.println(str2.toUpperCase());

System.out.println(str2.toLowerCase());

System.out.println(str2.substring(2));

System.out.println(str2.substring(2,10));

System.out.println(str2.indexOf('a'));

System.out.println(str2.lastIndexOf('a'));

}

}

==

It will check the value as well as reference code or hashcode.

.equals()

It will check only value doesn’t matter it may be same memory or different memory.

Example

import java.util.\*;

class Demo {

public static void main(String args[]) {

String name1 = "Raj Deep";

String name2 = "Raj Deep";

String name3 = new String("Raj Deep");

String name4 = new String("Raj Deep");

if(name3==name4) {

System.out.println("Equal");

}else {

System.out.println("Not Equal");

}

if(name3.equals(name4)) {

System.out.println("Equal");

}else {

System.out.println("Not Equal");

}

}

}