Primitive Data Type:

public class PrimitiveDataTypes {

public static void main(String[] args) {

byte theByte=-128;

short theshort=32\_000;

int theInt=123\_456\_789;

long theLong=1234567L;

float pi=3.14F;

double doublePi=3.14;

boolean isAdult=true;

char nameInitial='A';

System.out.println(theByte);

System.out.println(theshort);

System.out.println(theInt);

System.out.println(theLong);

System.out.println(pi);

System.out.println(doublePi);

System.out.println(isAdult);

System.out.println(nameInitial);

}

}

Non-Primitive Data Type:

public class NonPrimitiveDataTypes {

public static void main(String[] args) {

// non primitive data types

String name=new String("kuralarasan");

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

LocalDate now=LocalDate.now();

System.out.println(now);

System.out.println(now.getMonth());

}

}

Difference Primitive and Non-Primitive:

**public class DifferencePrimitiveAndNonPrimitive {**

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

**int a = 10;**

**int b = a;**

**a = 100;**

**System.out.println("a = " + a + ",b = " + b);**

**Person alex = new Person("alex");**

**Person mariam = alex;**

**System.out.println("before chaning alex");**

**System.out.println(alex.name+" "+mariam.name);**

**// alex.name="alexander";**

**mariam.name="mariam";**

**System.out.println("after changing alex");**

**System.out.println(alex.name+" "+mariam.name);**

**}**

**static class Person {**

**String name;**

**Person(String name) {**

**this.name = name;**

**}**

**}**

**}**

**1.Arithmetic Operations: (+ , - , \* , / , %)**

**2.Assignment Operators: (+=,-=,\*=,/=,%=)**

**3.Uniary Operators:**

1. **pre-increment - (++ variable name)**
2. **Post-increment - (variable name ++)**
3. **Pre-decrement - (-- variable name)**
4. **Post-decrement - (variable name --)**

**4.Relational or Comparsion Operators: (>,<,>=,<=,==,!=)**

**5.Logical Operators: (&& and ||)**

**Math Class:**

**public class MathClass {**

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

**System.out.println(Math.abs(-10));**

**System.out.println(Math.max(10, 20));**

**System.out.println(Math.min(10, 20));**

**System.out.println(Math.pow(5, 2));**

**System.out.println(Math.sqrt(9));**

**}**

**}**

**Statement:**

**1.Branching Statement:**

**If(condition){**

**}else if(condition){**

**}else{**

**}**

**Or**

**Switch(condition){**

**Case 1:**

**Break;**

**Case 2:**

**Break;**

**Default:break;}**

**public class IfStatement {**

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

**int age = 10;**

**if (age >= 18) {**

**System.out.println("adult");**

**} else if (age >= 16 && age < 18) {**

**System.out.println("almost adult");**

**} else {**

**System.out.println("not an adult");**

**}**

**}**

**}**

**2.Loop Statement:**

1. **for loop**

**Eg: int[] numbers={1,3,4,57,100,404,56}**

**For(int i=0;i<numbers.length;i++){**

**System.out.println(numbers[i]);**

**}**

1. **Enchance for loop**

**Eg: int[] numbers={1,3,4,57,100,404,56}**

**For(int number:numbers){**

**System.out.println(numbers[i]);**

**}**

1. **While loop**

**Eg: int count=0;**

**While(count<=20){**

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

**Count++;**

**}**

1. **ForEach loop**

**Eg: int[] numbers1 = { 1, 2, 3 };**

**Arrays.stream(numbers1).forEach(System.out::println);**

1. **Do-while loop**

**Eg: int count=0;**

**Do{**

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

**Count++;**

**}while(count<=20);**

**Arrays:**

**public class Arrays {**

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

**int[] numbers = new int[3];**

**numbers[0] = 1;**

**numbers[1] = 2;**

**numbers[2] = 3;**

**System.out.println(numbers[0]);**

**System.out.println(numbers[1]);**

**System.out.println(numbers[2]);**

**int[] numbers1 = { 1, 2, 3 };**

**System.out.println(numbers1.length);**

**String[] name = { "kural", "madhan" };**

**System.out.println(name[0]);**

**System.out.println(name[1]);**

**}**

**}**

**ScannerClass:**

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

**System.out.println(“what is your name”);**

**String userName=sc.nextLine();**

**Methods:**