**Assignment : Ravikant only :**

study all the data types in Java and prepare a document using code.

Data Type--:data type can be deffiend as the stourd the value

They are two type

1.Primative data type.Boolean,char,byte,short,int,long,float,double

2.Non-primative data type.String,array

1.Primative data type.Boolean,char,byte,short,int,long,float,double

boolean T,F 1 bite --:The Boolean data type is used to store only two possible values: true and false.

char 'A' 2 byte --:The char data type is used to store characters.

byte 10,4 1 byte --:The byte data type is used to save memory in large arrays where the memory savings is most required.

short 1,6 2 byte --:The short data type can also be used to save memory just like byte data type. A short data type is 2 times smaller than an integer.

int 1,9 4 byte --:The int data type is generally used as a default data type for integral values unless

long 100000L 8 byte --:long data type is used when you need a range of values more than those provided by int.

float 234.5f 4 byte --:It is recommended to use a float if you need to save memory in large arrays of floating point numbers.

double 12.3 --:Double data type is generally used for decimal values just like float.

2.Non-primative data type.String,array

String--:string is basically an object that represents sequence of char values. An array of characters works same as Java string

For example:char[] ch={'j','a','v','a','t','p','o','i','n','t'};

String s=new String(ch);

public class Main{

public static void main(String[]args){

string s1='ravi';//creating string

char[]ch={'k','u','s','h','w','a','h'a'};

String s = new String(ch);//converting char array to string

System.out.println(s1);

System.out.println(s2);

}

}

Array--:Array is the collection of the similar data type of element and contigurice of the memory location.

class TestArray1{

public static void main(String[]args){//main method

int a[] = {4,5,7,7};//declaration//print array

for(int i=0; i<=a.length; i++);//length is the property of array

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

}

}

For-each Loop for Java Array

for(data\_type variable:array){

//body of the loop

}

package org.example;

public class TestArray1 {

public static void main(String[] args) {

int a[]={23,56,7,3,9,5};

for(int i:a)

System.out.println(i);

}

}

Types of Array in java

There are two types of array.

Single Dimensional Array

Multidimensional Array

Syntax to Declare an Array in Java

dataType[] arr; (or)

dataType []arr; (or)

dataType arr[];

public class

String compareTo()--: String class compareTo() method compares the given string with the current string lexicographically. It returns a positive number, negative number, or 0

if s1 > s2, it returns positive number

if s1 < s2, it returns negative number

if s1 == s2, it returns 0

Syntax

public int compareTo(String anotherString)

Example-:

public class CompareToExample{

public static void main(String args[]){

String s1="hello";

String s2="hello";

String s3="meklo";

String s4="hemlo";

String s5="flag";

System.out.println(s1.compareTo(s2));//0 because both are equal

System.out.println(s1.compareTo(s3));//-5 because "h" is 5 times lower than "m"

System.out.println(s1.compareTo(s4));//-1 because "l" is 1 times lower than "m"

System.out.println(s1.compareTo(s5));//2 because "h" is 2 times greater than "f"

}}