# 1 StringBuffer class

class Stringbuff

{

public static void main(String args[])

{

StringBuffer s1=new StringBuffer();

StringBuffer s2=new StringBuffer(10);

StringBuffer s3=new StringBuffer("java");

System.out.println("content of s1"+s1);

System.out.println(s1.length());//no. of characters it contains

System.out.println(s1.capacity());//is the number of characters, it can contain without being expanded

System.out.println("content of s2"+s2);

System.out.println(s2.length());

System.out.println(s2.capacity());

s2.append("Java is");

System.out.println(s2.length());

System.out.println(s2.capacity());

System.out.println("content of s3"+s3);

System.out.println(s3.length());

System.out.println(s3.capacity());

s3.append(" is ");

System.out.println(s3);

s3.reverse();

System.out.println(s3);

s2.append("100% OOPs");

System.out.println(s2.length());

System.out.println(s2.capacity());

}

}

#2 String class

class stringmethod

{

public static void main(String args[])

{

String s="Test of String";

String test="abcdefgh";

String s1;

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

System.out.println(s);

s1= s.toLowerCase();

System.out.println("s1="+s1);

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

System.out.println(test);

System.out.println(test.substring(3));

System.out.println(test.substring(0,3));

System.out.println(test.substring(2,4));

System.out.println(test.substring(3,3));

String a[]={"Haldia", "Institute", "of","technology"};

System.out.println(a.length);// array length

System.out.println(test.length());// string length

System.out.println(test.indexOf('d'));

System.out.println(s.indexOf('t'));// first occurance

System.out.println(s.charAt(2));

System.out.println(s.replace('T','F'));// String objects are immutable, can't be altered

System.out.println(s);

}

}

#3 Immutability property String

class CheckString

{

public static void main(String s[])

{

String name="navin";

name=name+" gupta";

System.out.println("name= "+ name);

String s1="Navin";

String s2="Navin";

System.out.println(s1==s2);

}

}

#4 Difference between equals method and == operator

class eql

{

public static void main(String args[])

{

String s1="java";

String s2="JAVA";

String s3=new String(s1);//s1 s3 have diff reference

String s4;

s4=s1;//same reference

System.out.println("S1="+s1);// java

System.out.println("S2="+s2);//JAVA

System.out.println("s3="+s3);//java

System.out.println(s1+" equals "+s2+s1.equals(s2));

System.out.println(s1+" equals "+s2+s1.equalsIgnoreCase(s2));

System.out.println("equals the content "+ s1.equals(s3));// true

System.out.println("compare reference "+ (s1==s3));//false

System.out.println("compare reference "+ (s1==s4));//true

}

//concat(), trim(), toString(),valueOf()

}

#5 package creation

package complex;

public class complexNumber

{int real,image;

public complexNumber()

{}

public complexNumber(int r,int i)

{

real=r;

image=i;

}

public void complexAdd(complexNumber c1,complexNumber c2)

{

real=c1.real+c2.real;

image=c1.image+c2.image;

}

public void view()

{

System.out.println(real+"+i"+image);

}

}

#6 import package

import complex.complexNumber;

class comp

{

public static void main(String s[])

{

complexNumber a=new complexNumber(3,2);

complexNumber b=new complexNumber(1,3);

a.view();

b.view();

complexNumber c=new complexNumber();

c.complexAdd(a,b);

c.view();

}

}