Interfaces

//simple interface

interface Exam

{

void percent\_cal();

}

class Student

{

String name;

int roll\_no,mark1,mark2;

Student(String n, int r, int m1, int m2)

{

name=n;

roll\_no=r;

mark1=m1;

mark2=m2;

}

void display()

{

System.out.println ("Name of Student: "+name);

System.out.println ("Roll No. of Student: "+roll\_no);

System.out.println ("Marks of Subject 1: "+mark1);

System.out.println ("Marks of Subject 2: "+mark2);

}

/\*

public String toString()

{

String s;

s="Name of Student: "+name;

s+= "\nRoll No. of Student: "+roll\_no;

return s;

}

\*/

}

class Result extends Student implements Exam

{

Result(String n, int r, int m1, int m2)

{

super(n,r,m1,m2);

}

public void percent\_cal()

{

int total=(mark1+mark2);

float percent=total\*100/200;

System.out.println ("Percentage: "+percent+"%");

}

void display()

{

super.display();

}

}

class Test

{

public static void main(String args[])

{

Result R = new Result("Sammy Student",12,93,84);

R.display();

R.percent\_cal();

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

}

}

==============================================================

//Compare to

class Ex

{

public static void main(String args[])

{

Result R = new Result("Sammy Student",12,93,84);

R.display();

R.percent\_cal();

System.out.println(R);

String str1 = "Strings are immutable";

String str2 = "Strings are immutable";

String str3 = "Integers are not immutable";

int result = str1.compareTo( str2 );

System.out.println(result);

result = str2.compareTo( str3 );

System.out.println(result);

result = str3.compareTo( str1 );

System.out.println(result);

}

}

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//Interfaces / Generics

interface Comparable<T>

{

int compareTo(T o);

}

class Employee implements Comparable<Employee>{

private int rank;

private String name;

public int compareTo(Employee e)

{

return this.rank - e.rank;

}

public Employee(String n, int r)

{

rank = r;

name = n;

}

public String toString()

{

return name + " : " + rank;

}

}

class Test

{

public static void main(String [] args)

{

Employee bigShot = new Employee("Joe Manager", 10);

Employee littleShot = new Employee("Homer Simpson", 1);

int c = bigShot.compareTo(littleShot) ;

if (bigShot.compareTo(littleShot) > 0)

{

System.out.println(bigShot + " " + c);

System.out.println(littleShot);

}

else

{

System.out.println(littleShot);

System.out.println(bigShot);

}

}

}