JavaNotes

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**equals()**

**- equals() is used to compare the content/members of two objects.**

**- equals() is used for content comparison.**

**syntax: public boolean equals(Object obj)**

**1.**

**package comparingobjects;**

**public class Student {**

**int age;**

**Student(int age) {**

**this.age = age;**

**}**

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

**Student s1 = new Student(20);**

**Student s2 = new Student(20);**

**System.out.println(s1 == s2); // false**

**System.out.println(s1.equals(s2)); // false**

**}**

**}**

**2.**

**package comparingobjects;**

**public class Student {**

**int age;**

**Student(int age) {**

**this.age = age;**

**}**

**@Override**

**public boolean equals(Object obj)**

**{**

**Student s = (Student) obj;**

**return this.age == s.age;**

**}**

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

**Student s1 = new Student(20);**

**Student s2 = new Student(20);**

**System.out.println(s1 == s2); // false**

**System.out.println(s1.equals(s2)); // true**

**}**

**}**

**// s1 -> this**

**// s2 -> obj -> s**

**o/p:**

**false**

**true**

**3.**

**package comparingobjects;**

**public class Employee {**

**int id;**

**double height;**

**Employee(int id, double height) {**

**this.id = id;**

**this.height = height;**

**}**

**@Override**

**public boolean equals(Object obj)**

**{**

**Employee emp = (Employee) obj;**

**return this.id == emp.id && this.height == emp.height;**

**}**

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

**Employee e1 = new Employee(101, 5.8);**

**Employee e2 = new Employee(102, 5.8);**

**System.out.println(e1.equals(e2));**

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

**System.out.println(new Employee(1, 5.7).equals(new Employee(1, 5.4)));**

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

**if(e1.equals(e2)) {**

**System.out.println("Contents are Same");**

**}**

**else {**

**System.out.println("Contents are Different");**

**}**

**}**

**}**

**o/p:**

**false**

**---------------------**

**false**

**----------------------**

**Contents are Different**

**2. hashCode()**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**syntax : public int hashCode()**

**hashCode() is used to identify an object uniquely**

**hashCode() return a number or id to uniquely Identify an Object.**

**5.**

**package** com;

**public** **class** Employee {

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

Employee e = **new** Employee();

System.***out***.println(e.hashCode());

}

}

**o/p:**

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6.

**package** com;

**public** **class** Employee {

@Override

**public** **int** hashCode() {

**return** 124;

}

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

Employee e = **new** Employee();

System.***out***.println(e.hashCode());

}

}

o/p:

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