```
public class Start {
    public static void main(String[] args)
    {

        Student s1 = new Student("Bart", 1);
        Student s2 = new Student("Bart", 1);

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

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

        Student s3 = new Student("Lisa", 5);
        Student s4 = new Student("Millhouse", 4);

        s1.compareObjects(s2);
        s3.compareObjects(s4);



        System.out.println(s1.hashCode());
        System.out.println(s2.hashCode());
        System.out.println(s3.hashCode());
        System.out.println(s4.hashCode());

    }
}
package dotequals;

public class Student {
    private String name;
```

```
private int studentNumber;

public Student(String name, int studentNumber) {
    this.name = name;
    this.studentNumber = studentNumber;
}

public int getStudentNumber()
{
    return studentNumber;
}

public void setStudentNumber(int studentNumber)
{
    this.studentNumber = studentNumber;
}

public String getName()
{
    return name;
}
public void compareObjects(Object o2)
{
    if(this.equals(o2))
    {
     if (this.hashCode() == o2.hashCode())
    {
        System.out.println("Objects are equal");
    }
```

```
        }
        else
        {
            System.out.println("Objects are not equal");
        }
    }



    @Override
    public boolean equals(Object object)
    {
        Student otherStudent = ((Student) object);

        return this.studentNumber == ((Student) object).getStudentNumber()
&& this.getName() == otherStudent.getName();

    }

    @Override
    public int hashCode()
    {
        int total = 0;
        for(int i =0; i< this.name.length(); i++)
        {
           total += (int) this.name.charAt(i);
        }
        return (9934/this.getStudentNumber()+total * 993456);
    }
```

```
}
```