

```
public class PersonProject
{
    public String name;
    public int age;

    //constructor
    public PersonProject(String personName, int personAge)
    {
        name = personName;
        age = personAge;
    }

    public boolean theyAreEqual (PersonProject otherPerson)
    {
        return name.equals(otherPerson.name) && age == otherPerson.age;
    }
    public boolean nameAreEqual (PersonProject otherPerson)
    {
        return name.equals(otherPerson.name);
    }
    public void olderThanOther (PersonProject otherPerson)
    {
        String ageResult = age > otherPerson.age?name:otherPerson.name;
        System.out.println (ageResult + " is older");
    }
    public void youngerThanOther (PersonProject otherPerson)
    {
        String ageResult = age < otherPerson.age?name:otherPerson.name;
        System.out.println (ageResult + " is younger");
    }
    public void ageCheck (PersonProject otherPerson)
    {
        if (age > otherPerson.age)
        {
            int ageNum = age - otherPerson.age;
            String ageResult = name;
            System.out.println (ageResult + " is " +" " + ageNum + " older than " +
otherPerson.name);
            System.out.println (otherPerson.name + " is " + ageNum + " younger than
" + ageResult);
        }
        else if (age < otherPerson.age)
        {
            int ageNum = otherPerson.age - age;
            String ageResult = otherPerson.name;
```

```
        System.out.println (ageResult + " is " + ageNum + " older than " +
name);
        System.out.println (name + " is " + ageNum + " younger than " +
ageResult);
    }

}
```

```
public class PersonProjectTest
{
    public static void main(String[] args)
    {
        PersonProject person1 = new PersonProject("Michael", 30);
        PersonProject person2 = new PersonProject("John", 50);
        System.out.println ("Are they equal?" + person1.theyAreEqual(person2));
        person1.olderThanOther(person2);
        person1.youngerThanOther(person2);
        person1.ageCheck(person2);

    }
}
```

## Output

Are they equal? **false**

**John** is older

**Michael** is younger

**John** is **20** older than **Michael**

**Michael** is **20** younger than **John**