

```
1 // Ch9Demo4
2
3 import java.util.Scanner;
4
5 public class Ch9Demo4
6 {
7     public static void main (String [] args)
8     {
9         Comparable thing1, thing2;
10
11         Scanner keyboard = new Scanner (System.in);
12         System.out.print ("Enter 1 or 2: " );
13         String input = keyboard.nextLine ();
14         int num = Integer.parseInt (input);
15
16         if (num == 1)
17         {
18             thing1 = new Student (4.0, "jason", 72);
19             thing2 = new Student (3.4, "courtney", 63);
20
21             // you MUST cast in the if statement below since thing1 and thing2
22             // are declared as Comparable references...even though they are
23             // instantiated as Student objects you cannot make use of the
24             // getGPA method unless you first cast them to Student's
25
26             if (((Student) thing1).getGPA () > ((Student) thing2).getGPA ())
27                 System.out.println (thing1 + "'s GPA is greater" );
28             else
29                 System.out.println (thing2 + "'s GPA is greater" );
30         }
31         else
32         {
33             thing1 = "Avalanche" ;
34             thing2 = "Broncos" ;
35
36             // you must cast thing1 & thing2 to Student's for the same reason
37             if (((String) thing1).length () > ((String) thing2).length ())
38                 System.out.println (thing1 + " is longer than " + thing2);
39             else
40                 System.out.println (thing2 + " is longer than " + thing1);
41         }
42     }
43 }
44
45
46 }
47
48
49
50
```