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1  /****
2   * Name: Zongxu Li(Victor)
3   * Student Number: T00521219
4   * Assignment Number: 2
5   * Due Date: Oct 4, 2022
6   * Program description: This program is testing for inheritance, which we have
  drive class named Tester,
7   * and parents class named: Person and child staff. testing equal method, array and
  changing variable.
8   */
9
10 public class Tester //This is driver class, testing all the methods.
11 {
12     public static void main(String[] args)
13     {
14         Person p1 = new Person(); //Prepare for the equal method.
15         Person p2 = new Person("Steve", "S1230000");
16
17         Staff stf1 = new Staff();
18         Staff stf2 = new Staff("Paul", "SPC002211", "Security Guard");
19
20         System.out.println("showing inital child class student values set by
  default and parameterized constructors");
21         System.out.println(stf1);
22
23         System.out.println("Set up value for parameterized value to
  constructor");
24         System.out.println(stf2);
25         System.out.println();
26
27         stf1.setName("Tom");
28         stf1.setId("SPC456511");
29         stf1.setJobtitle("Admission");
30
31         System.out.println("Now testing on the get method for getName, getId,
  getJobtitle");
32         stf1.getName();
33         System.out.println(stf1.getName());
34         stf1.getId();
35         System.out.println(stf1.getId());
36         stf1.getJobtitle();
37         System.out.println(stf1.getJobtitle());
38
39         System.out.println("End of testing get method for Student class");
40         System.out.println();
41
42         System.out.println("Testing about setName, setId, setJobtitle and set
  method");
43         System.out.println(stf1);
44         System.out.println(stf2);
45         System.out.println();
46
47         System.out.println("Testing person1 compare to person1, make sure the
  method is working."); //Testing equal class.
48         System.out.println(p1.equals(p1));
49         System.out.println("Testing person1 compare to person2. They have
  different objects");
50         System.out.println(p1.equals(p2));
51
52         System.out.println();
53         System.out.println("Creating arries for Student, Faculty, Staff");
54         Student s1 = new Student("Tommy", "T0000212", "BBA", 3.5); //Writing two
  objects for Student, Faculty, and Staff. Prepare for array.
55         Student s2 = new Student("Jim", "J0000313", "BCS", 2.7);
56         Faculty f1 = new Faculty("Jason", "S0000414", "Math", "Professor");
57         Faculty f2 = new Faculty("Tod", "B0000166", "Science", "Assistant");
58         Staff st1 = new Staff("Steven", "M0000919", "Security");
59         Staff st2 = new Staff("Bella", "A0000717", "Librarian");
60         Person[] people = {s1, s2, f1, f2, st1, st2};
61         for (int i=0; i<people.length; i++) //Creating a for loop to print all
  C:\Users\Vic\AppData\Local\Temp\Tester.java

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the values stores in array.
62     {
63         System.out.println(people[i]); //print i[0], then i[1]...etc, i add
one index at each time.
64     }
65     System.out.println();
66
67     System.out.println("Changing the value of s2(Jim, J0000313, BCS, 2.7)
GPA");
68     ((Student)people[1]).setGpa(2.0);
69     System.out.println(s2);
70     System.out.println("After change GPA, Jim GPA changed from 2.7 to 2.0");
71
72     }
73
74
75 }

```