CSC 230-01 Modern Prog Applications Spring 2018

Assignment 6

What to hand in

Create a folder called "Assignment_6". Inside the folder, create a folder for each program and deposit the source code to the corresponding folder. Use packing software to pack "Assignment_6" to a packed file, such as "Assignment_6.zip" or "Assignment_6s.tar". Submit the packed file through the blackboard.

Due Date

12:00 midnight, March 28, 2018.

Program 1: Complete the following code

```
1. public class Temp
2. {
3.      //convert fahrenheit temperature to celsius temperature
4.      public static double f2c(double f)
5.      {
6.           double c;
7.
8.           //put your code here
9.
10.               return c;
11.          }
12.
13.          //convert celsius temperature to fahrenheit
   temperature
14.          public static double c2f(double c)
15.          {
16.               double f;
17.
18.               //put your code here
19.
20.               return f;
```

```
21.          }
22.
23.          public static void main(String args[])
24.          {
25.               Scanner s = new Scanner(System.in);
26.
27.               double f, c;
28.
29.               System.out.println("Enter the Fahrenheit
   temperature:");
30.               f = s.nextDouble();
31.               System.out.printf("Celsius temperature: %f\n",
   f2c(f));
32.
33.               System.out.println("Enter the Celsius
   temperature:");
34.               c = s.nextDouble();
35.               System.out.printf("Fahrenheit
   temperature: %f\n", c2f(c));
36.          }
37.     }
```

Program 2: Complete the following code

```
1. public class Student
2. {
3.      private int grade;
4.      private String name;
5.
6.      // constructor
7.      public Student(String name, int grade)
8.      {
9.           this.grade = grade;
10.               this.name = name;
11.          }
12.
13.          //accessor
14.          public int getGrade() {return grade;}
```

```
15.         public String getName() {return name;}
16.
17.         public boolean greater(Student s  )
18.         {
19.              //put your code here
20.              //compare two grades
21.              return true;
22.         }
23.
24.         public static void main(String args[])
25.         {
26.              Student s1 = new Student("David", 90);
27.              Student s2 = new Student("Mike", 85);
28.
29.              if (s1.greater(s2))
30.              {
31.                   System.out.printf("%s has better grade
  than %s\n", s1.getName(), s2.getName());
32.              }
33.         }
34.    }
```

Program 3: Write a Java program, create three students:
1. get the student with better score from the first two students;
2. get the student with the best score
Hint: use method overloading

Program 4: Write an application that simulate dice tossing. Let the program toss a dice 100 times, count the number of getting 6

Grading Criteria

1. 40%, be able to be compiled without compile errors.
2. 30%, be able to run and generate the expected outputs.
3. 20%, comments.