1. Construct a class named sphere that has a double-precision data member named radius. The class should have the following class functions:

   i. A constructor with the default values of 1 for radius data member.

   ii. An accessor function named showData() that displays a sphere's radius.

   iii. A mutator function named setData() to set a sphere's radius.

   iv. A class function named surfaceArea() that calculates and displays a sphere's surface area.

   v. A class function named volume() that calculates and displays a sphere's volume.

   Please test each member function in main ().

2. Construct a class named Circle that has double-precision data members named radius. The class should have member functions named perimeter() and area() to calculate a circle's perimeter and area, a member function named setData() to set a circle's radius, and a member function named showData() that displays a radius's radius, perimeter, and area.

   Please test member functions with pointers in main ().

3. Construct a class named Student consisting of an integer student ID number and a double-precision grade point average. The constructor for this class should initialize the ID number to 111111 and the grade point average to 0.0. Include an accessor function to display all data values. Your program should declare two objects of type Student and display data for the two objects to verify the operation of the class functions.

4. （1）Construct a class definition to represent an employee of a company. Each employee is defined by an integer ID number, a double-precision pay rate, and the maximum number of hours the employee should work each week. The services the class provides should be the capability to enter data for a new employee, the capability to change data for a new employee, and the capability to display existing data for a new employee.

   （2）Include the class definition created for (1) in a working C++ program that asks the user to enter data for three employees and then displays the entered data.