

CMSC131 Spring 2005 Quiz #5, Duration 15 Minutes

First Name:	Last Name:	Student Id: cs131 _ _ _			
Section time (circle one): 8AM	9AM	10AM	11AM	12PM	1PM

Problem Description

Write a complete Java class named **Message**. The class has two private instance variables named *text* (String) and *cost* (double) which represent the message's *text* and *cost*, respectively. All the methods of the class are **non-static** except the method named **append** (described below). The methods you must implement are:

1. **Default Constructor** – Initializes the object with the value “NOMESSAGE” and 1.0.
2. **Constructor** – Initializes the object using two parameters that represent the text and cost of the object, respectively.
3. **Copy Constructor** – Creates a copy based on the parameter object. The *text* instance variable is initialized with a duplicate of the parameter's text.
4. **toString** – Returns a string generated by concatenating “Text: ”, *text*, “ Cost: ”, and *cost*.
5. **equals** – Boolean method that tests whether the current object has the same text as another Message, which is given as the single parameter.
6. **append** – A **static** method that takes two Message object parameters and returns a new Message object. The text of the new object is generated by concatenating the text of the first and second parameters. The new cost is the sum of the objects' costs.

Restrictions/Assumptions

1. You don't need to provide comments.
2. You cannot add any other instance variables or methods.

BEGIN YOUR IMPLEMENTATION HERE (CONTINUE ON THE BACK IF NECESSARY)