

## CMSC131 Spring 2005 Quiz #6, Duration 15 Minutes

**First Name:**

**Last Name:**

**Student Id:**

**Section time:**

**TAs:**

### Problem Description

A class called **PriorityList** represents a set of students waiting for advising. The class relies on the Student class defined below. A student object has a name and a priority value.

**/\* YOU MAY NOT MODIFY THIS CLASS \*/**

```
public class Student {
    private String name;
    private int priority;

    public Student(String sname, int sPriority) {
        name = sname;
        priority = sPriority;
    }

    public Student(Student student) {
        name = new String(student.name);
    }

    priority = student.priority;
}

public int getPriority() {
    return priority;
}

public String toString() {
    return name + " " + priority;
}
```

For this quiz you will implement the **add** method (just define the method's body) of the **PriorityList** class. The method makes a copy of the student object parameter and adds the copy to the end of the array representing the students' list, if the priority of the student is less than the priority of the first student in the list (student in array index position 0). Otherwise, the student will be added to the beginning of the list.

### Assumptions/Restrictions

- If the list is empty just add the student.
- Each student has a unique positive priority value.
- You may not add any instance variables or methods.
- You may not modify the provided constructor.

```
public class PriorityList {
    private Student[] array; // represents the list of students

    public PriorityList() {
        array = null;
    }

    public void add(Student student) {
        /* Provide body for this method */
    }
}
```

**WRITE YOUR IMPLEMENTATION ON THE NEXT PAGE**



**WRITE YOUR IMPLEMENTATION ON THIS PAGE**