CIS 121 - Quiz 1 - Wednesday, June 4, 2003

Name: ___________________________ StudentNumber: _______________________

1. (2 pts) Suppose we have the following lines of code.

```java
  int[] numbers = new int[5];
  numbers = new int[10];
```

Does this violate the fact that after an array is created, its size can’t be changed during execution? Why or why not?

2. (2 pts) _________________ is the binding together of data and the code that operates on the data whereas _________________ is the ability to restrict the access to or the visibility of data.

3. (2 pts) We know that a variable in a class definition is an instance variable if its declaration does not contain the keyword _________________, and if our class definition contains an object reference as an instance variable and that variable is not explicitly initialized by a constructor, then its initial value is _________________ when an instance of the class is created.

4. (2 pts) Suppose we have the code `public class A extends B`. We say that ______ “is a” ______ which means that objects created from class ______ can be treated as if they are objects of class ______.

5. (2 pts) Is a syntax error reported when we try to compile Subclass.java? If so, what syntax error is reported and why?

```java
public class Superclass {
  protected String a;
  public Superclass(String a) {
    this.a = a;
  }
}

public class Subclass extends Superclass {
  public Subclass() {
    a = “Hello”;
  }
}
```