CIS 121 - Quiz 2 - Friday, June 4, 2004

Name: ________________________________  J Number: ________________________________

1. (2 pts) ________________________ is the binding together of data and the code which operates on the data. How does Java support this concept?

2. (2 pts) We distinguish an instance variable from a class variable by placing the keyword ________________________ in the declaration of the class variable. If a method is a class method or the main method, can it access an instance variable in the class definition?

3. (2 pts) An object can use the keyword ________________________ to refer to itself and the keyword ________________________ to refer to the class it extends.

4. (2 pts) The process of changing the implementation of a method that is inherited is called ________________________, and adding a method whose header is public String toString(String s) to a class definition is an example of ________________________. (Recall what is inherited by all classes.)

5. (2 pts) Consider the following two class definitions. Is there a syntax error when we try to compile Subclass.java? If not, what is printed when we interpret Subclass?

```java
public class Question5 {
public int number;
public Question5(int number) {
this.number = number;
}
public Question5() {
number = 1;
}
}

public class Subclass extends Question5 {
pprivate int number1;
ppublic Subclass(int number1) {
this.number1 = number1 + number1;
}
ppublic String toString() {
return(number1 + "");
}

public static void main(String[] args) {
Subclass subclass = new Subclass(2);
System.out.println(subclass);
}
```