Quiz 2

1.
Which of the following statements is FALSE in relation to generics?

○	A generic class used without type arguments is known as a *raw type*
○	You cannot instantiate an array of a generic type using new operator e.g., T[] anArray = new T[100]
○	Consider the following method, someMethod(Box<Number> n) { /*…. */}, this method can take in a Box<Integer> or Box<Double>

2.
Consider the following code:

```
public interface xyz {
void abc() throws IOException;
}
public interface pqr {
void abc() throws FileNotFoundException;
}
public class Implementation implements xyz, pqr {
// insert code
{ /*implementation*/ }
}
```

Which of the following statement(s) can you insert in place of "// insert code" comment?

○	public void abc() throws FileNotFoundException, IOException
○	public void abc() throws IOException
○	public void abc() throws FileNotFoundException

3.
A design pattern used to enhance a component's functionality dynamically at run-time is:

○	Composite Pattern

○	Decorator Pattern
○	Abstract Factory Pattern
○	Observer Pattern

4.

- **Which Design Pattern should you use when....**
  - **there is a language to interpret, and you can represent statements in the language as abstract syntax trees.**

○	Singleton
○	State
○	Composite
○	Factory

5.

Identify the pattern used in this code:

```
LineNumberReader lnr = new LineNumberReader(
                       new BufferedReader(
                       new FileReader(“./test.c")));
String str = null;
while((str = lnr.readLine()) != null)
System.out.println(lnr.getLineNumber() + ": " + str);
```

○	Strategy
○	State
○	Factory
○	Decorator

6.

Which of the following exceptions must be handled by a try-catch block or declared?

○	NullPointerException
○	MalformedURLException
○	ClassCastException
○	ArithmeticException

7.
Which of the following statements is NOT true?

○	The Builder Pattern is a violation of the law of demeter
○	Decorators provide a flexible alternative to inheritance for extending functionality.
○	The observer pattern provides a design where subjects and observers are loosely coupled
○	The Factory Method Design Pattern uses inheritance to solve the problem of creating objects without specifying their exact object classes

✔ Submit