Practice Quiz on Exceptions

In each of the following examples of Exception handling, write the output that results from the main method getting called in the class `FinallyTest`.

1. Nothing in try block:

```java
class FinallyTest {
  public static void test() throws Exception {
    try {
    }
    catch (Exception x) {
            System.out.println(x.getMessage());
      throw new Exception("second");
    }
    finally {
      System.out.println("finally!");
    }
    System.out.println("last statement");
  }

  public static void main(String[] args){
        try{
          test();
        }
        catch(Exception x){
          System.out.println(x.getMessage());
        }
      }
    }
```

2. Return in try block:

```java
class FinallyTest {
  public static void test() throws Exception {
    try {
      return;
    }
    catch (Exception x){
            System.out.println(x.getMessage());
      throw new Exception("second");
    }
    finally {
      System.out.println("finally!");
    }

  }
```

```java
      public static void main(String[] args){
    try{
      test();
    }
    catch(Exception x){
      System.out.println(x.getMessage());
    }
  }
}
```

3. System.exit in try block:

```java
class FinallyTest {
  public static void test() throws Exception {
    try {
      System.exit(0);
    }
    catch (Exception x){
            System.out.println(x.getMessage());
          throw new Exception("second");
    }
    finally {
      System.out.println("finally!");
    }
    System.out.println("last statement");
  }

        public static void main(String[] args){
    try{
      test();
    }
    catch(Exception x){
      System.out.println(x.getMessage());
    }
  }
}
```

4. throw new Exception in try block:

```java
class FinallyTest {
  public static void test() throws Exception {
    try {
      throw new Exception("first");
    }
    catch (Exception x){
        System.out.println(x.getMessage());
    }
```

```
        finally {
            System.out.println("finally!");
        }
    }

    public static void main(String[] args){
            try{
                test();
            }
            catch(Exception x){
                System.out.println(x.getMessage());
            }
        }
    }
```

5. throw new Exception in try block and printout last statement:

```
    class FinallyTest {
      public static void test() throws Exception {
        try {
            throw new Exception("first");
        }
        catch (Exception x){
            System.out.println(x.getMessage());
        }
        finally {
          System.out.println("finally!");
        }
        System.out.println("last statement");
      }

    public static void main(String[] args){
            try{
                test();
            }
            catch(Exception x){
                System.out.println(x.getMessage());
            }
        }
    }
```