Exceptions Exercise

1. The method `Integer.parseInt` throws the `NumberFormatException` if the string parameter does not represent an integer value. Write a method that keeps asking the user for an integer as long as an invalid value is provided. You should catch the `NumberFormatException` and add any code needed to keep asking the user for a value.

2. What is the difference between a check and an unchecked exception?

3. Define a checked exception named “InvalidConfiguration” that has as error message “Invalid System Configuration has occurred.” Write a piece of code that throws this exception.

4. Write a code example that illustrates how an exception backtracks to callers, looking for an appropriate catch clause.