THE UNIVERSITY OF MELBOURNE School of Computing and Information Systems

COMP90041

Programming and Software Development

Second Semester, 2018

Lab 10 — Programming Practice (Week 11) Exceptions

Workshop Exercises

These are just for practice, and will not be assessed.

1. Write a complete Java program that prompts the user for, and uses nextInt() to read in, two nonnegative integer numbers. Use a try/catch block to handle the InputMismatchException that is thrown if the user types in something other than an integer. In this case, print a suitable error message and exit the program.

Homework

These will also not be assessed.

- 2. Define an exception class called NegativeNumberException. The class should have a constructor with no parameters. If an exception is thrown with this zero-argument constructor, getMessage should return "Negative Number Not Allowed!". The class should also have a constructor with a single parameter of type String. If an exception is thrown with this constructor, then getMessage returns the value that was used as an argument to the constructor.
- 3. Revise the program in Exercise 1 above to use your new NegativeNumberException. Write a (static) method to print a prompt and read in a non-negative number. It should throw a NegativeNumberException if a negative number is entered. Then modify your main to catch NegativeNumberException as well as InputMismatchException and print a suitable error message in each case.