

CS2365 – Spring2021
Homework#8

1. Write a program that calculates the average of N positive integers. The program should prompt the user to enter the value for N and then afterward must enter all N numbers. If the user enters a nonpositive value for N , then an exception should be thrown (and caught) with the message “ N must be positive.” If there is any exception as the user is entering the N numbers, an error message should be displayed, and the user prompted to enter the number again. (5pts)
2. Write a program that converts dates from numerical month/day/year format to normal “month day, year” format (for example, 12/25/2000 corresponds to December 25, 2000). You will define three exception classes, one called `MonthException`, another called `DayException`, and a third called `YearException`. If the user enters anything other than a legal month number (integers from 1 to 12), your program will throw and catch a `MonthException` and ask the user to reenter the month. Similarly, if the user enters anything other than a valid day number (integers from 1 to either 28, 30, or 31, depending on the month and year; to simplify day number for each month, assume that February has 28 days), then your program will throw and catch a `DayException` and ask the user to reenter the day. If the user enters a year that is not in the range 1000 to 3000 (inclusive), then your program will throw and catch a `YearException` and ask the user to reenter the year. (There is nothing very special about the numbers 1000 and 3000 other than giving a good range of likely dates.) (5 pts)