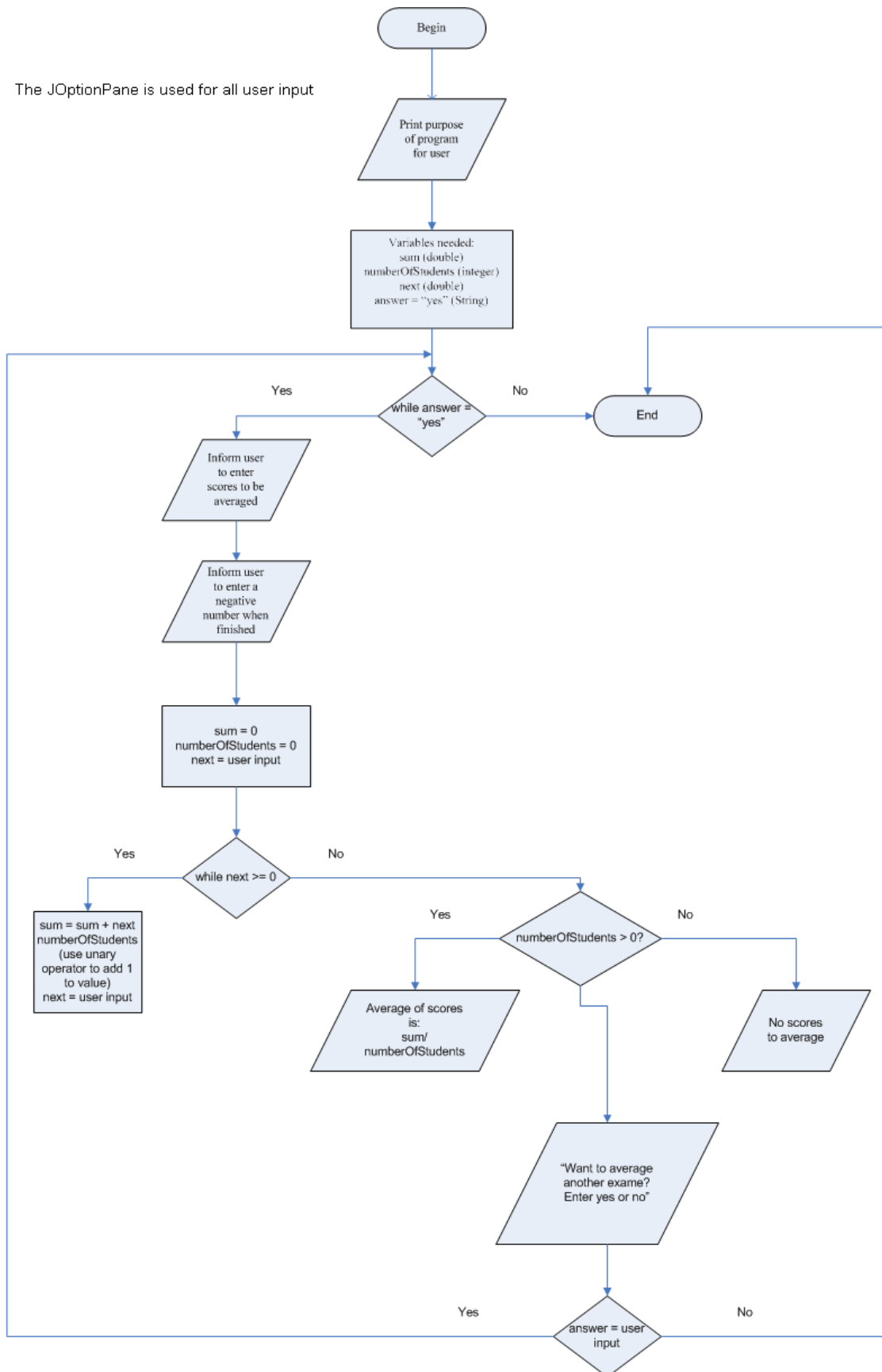# CIT 149: Java I
Chapter 3
Programming Assignment 2

In this program you will request the user enter between 2-4 numbers. All input and messages will take place using the JOptionPane.showInputDialog() and JOptionPane.showMessageDialog(). After the user enters the number of scores they wish to enter, a new input dialog box will appear asking them to enter the first number, two number, etc. Afterwards a message box will appear showing the user the average of the numbers they entered. This assignment also includes a switch statement and some minor calculations. The flowchart is:

The JOptionPane is used for all user input

Begin

Print purpose
of program
for user

Variables needed:
sum (double)
numberOfStudents (integer)
next (double)
answer = "yes" (String)

while answer =
"yes"

Yes →

No → End

Inform user
to enter
scores to be
averaged

Inform user
to enter a
negative
number when
finished

sum = 0
numberOfStudents = 0
next = user input

while next >= 0

Yes →

No →

sum = sum + next
numberOfStudents
(use unary
operator to add 1
to value)
next = user input

numberOfStudents > 0?

Yes →

No →

Average of scores
is:
sum/
numberOfStudents

No scores
to average

"Want to average
another exame?
Enter yes or no"

answer = user
input

Yes

No

2

A great deal of the code in each case statement is similar in nature which is save you a great deal of time. You will request that the user:

- Enter either 2, 3, or 4 based on whether they wish to enter 2, 3, or 4 scores to be averaged, and assign the input to the choice variable.
- The switch statement will have cases of 2, 3, and 4.
- case 2
    - will ask the user to input score1 and then score2 and average the two numbers.
- case 3
    - will ask the user to input score1, then score2, and finally score3 and average the 3 numbers
- case 4
    - will ask the user to input four scores and average the 4 numbers
- Finally you will display the value of the average
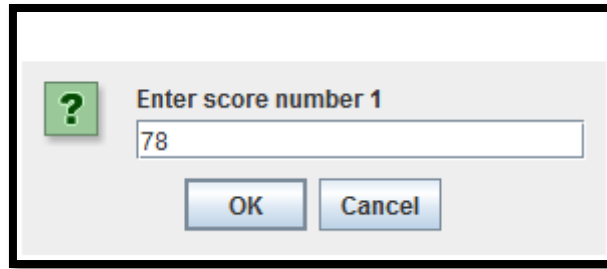
The following shows some screen shots of possible input information:
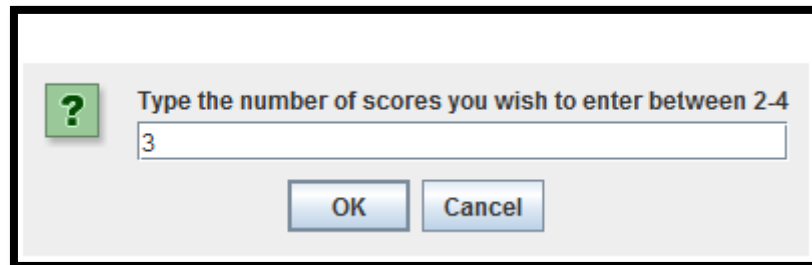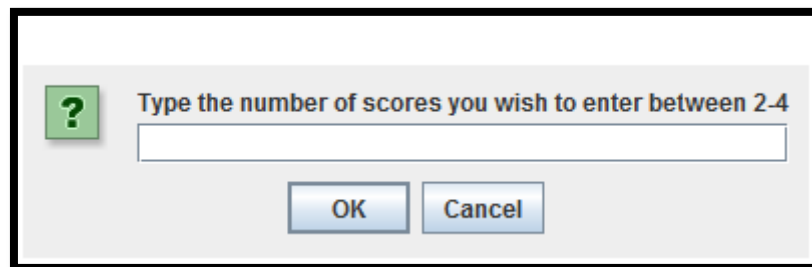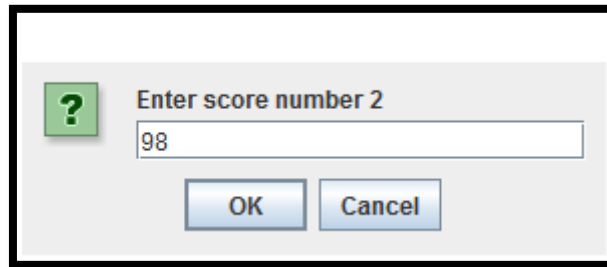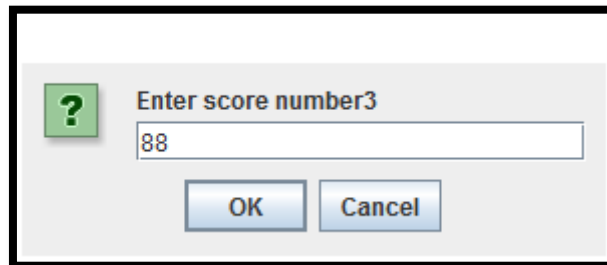

I entered 3 for the number of scores and hit OK.
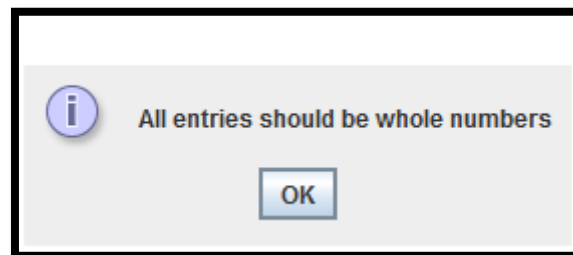
I receive a message that all numbers must to whole numbers
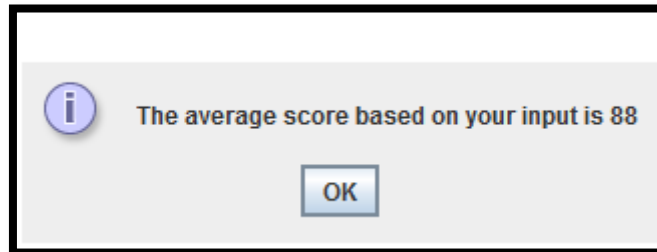
I'm requested to enter the first number, and I enter 78

I'm requested to enter the second number, and I enter 98

I'm requested to enter the third number, and I enter 88

The average of the entered numbers is displayed

You must use the switch statement in this assignment. You cannot use if/else statements to complete it.

Compress the source and class files into a single zip or rar file and submit to the appropriate drop box.