Programming Exercises - PRO1 - Session 22
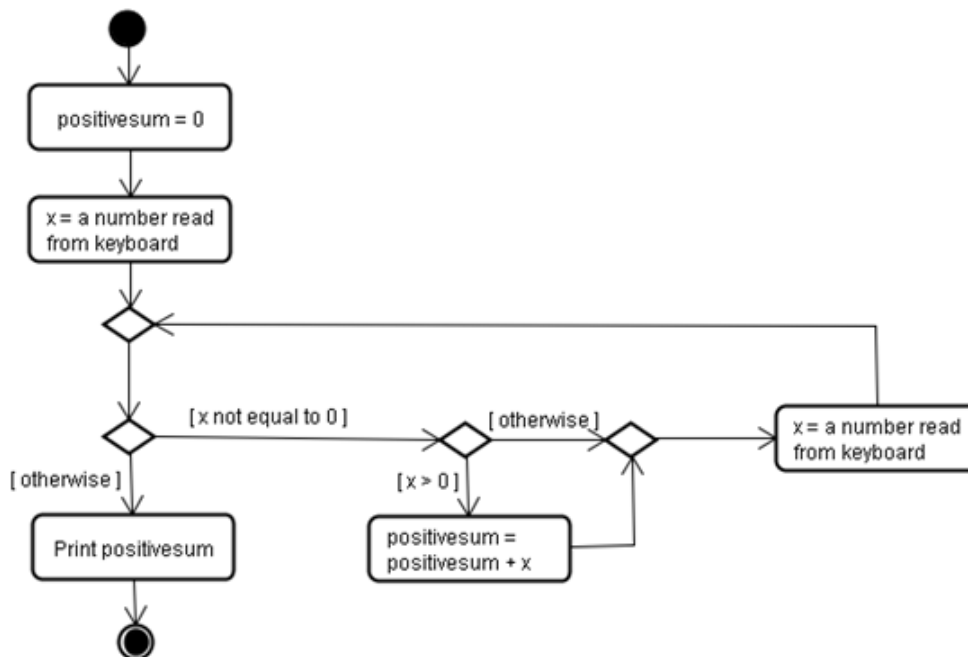
Exercise 22.01

Make activity diagrams for the following scenarios:

a) Calculating the sum of 5 integers read from keyboard.
b) Going to a book store to buy books, paper and pencils.
c) The activities in an airport from when you arrive to leaving on your flight.
d) For those who still remember it: The various activities you participated in during the introduction days at VIA.
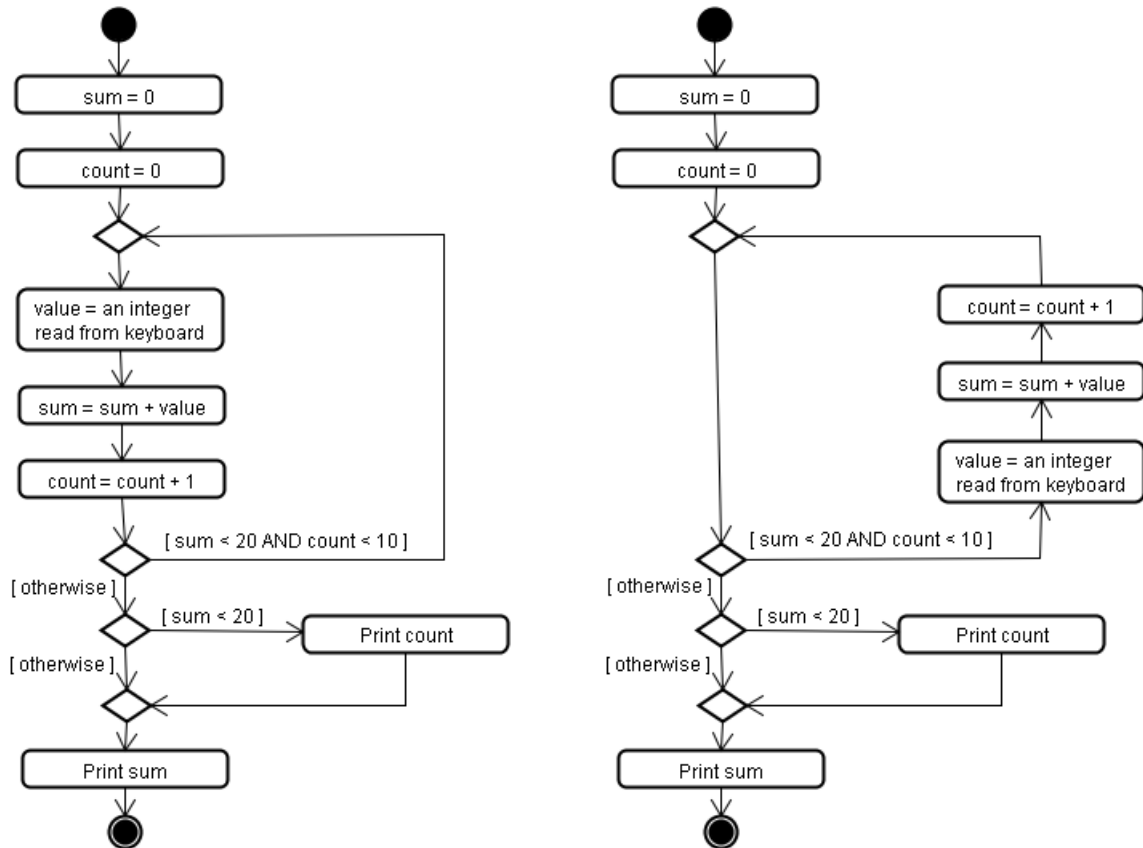
Exercise 22.02

Look at the UML Activity diagram below:

a) Can you identify any selections? If yes, is it if, if-else or switch?
b) Can you identify any loops? If yes, is it for, while or do-while?
c) Implement the activity diagram in a main method.
d) Make some changes to the activity diagram so that both the sum of all positive numbers and sum of all negative numbers are calculated and printed at the end.
e) Implement these changes in a new Java program.

Exercise 22.03

Examine the two activity diagrams below. Determine the difference between them, and then implement both.

Exercise 22.04

Draw sequence diagrams for the following scenarios:
  a) Buying a meal in the canteen
  b) A course instructor creating a test and adding a few question to it

Exercise 22.05

Look at some of your previous exercises, e.g. the Notebook one, and try drawing a sequence diagram of the objects and method calls involved.