**Activity 12 – Intro to Flow Charts**

# FLOWCHARTS

Flowcharts and Pseudo Code: For the following questions create the Java program as well as the flowchart diagram.

1) Please draw a logical flowchart for each of the following question (break down each part into a flow chart separately):

1. Read 2 numbers and multiply them together and display them
2. Read one number and tell the use if the number equals to 5 or not
3. Read a number. If number is between 1 and 10, display blue, if between 10 and 20, display green, and otherwise display incorrect value.

2) Please draw a logical flowchart for this problem:

* We need to create a calculator for a ticket system (music show)
* Children and adults are invited to this show
* We want to system to calculate the total amount that must be paid for each family.
* Ticket prices
  + For an adult: 30$
  + For a children: 15$
* There are sales taxes that needs to be calculated for this sale
  + GST (Goods and services tax): 5%
  + QST (Quebec sales tax): 9.975%

**How the program should interact with the user:**

**How many adults? \_\_ 🡸** user inputs the number of adults

**How many kids? \_\_ 🡸** user inputs the number of kids

**Total: \_\_\_\_\_\_\_\_ 🡸** Software outputs total before tax

**GST: \_\_\_\_\_\_\_\_ 🡸** Software outputs the GST total

**QST: \_\_\_\_\_\_\_\_ 🡸** Software outputs the QST total

**Please pay:**

3) **Please draw a logical flowchart for this problem: (slight modification to problem #2)**

* We need to create a calculator for a ticket system (music show)
* Children and adults are invited to this show
* We want to know the age of each person for each family.
* We want to count the number of persons
* Age:
  + Adult – below 18
  + Children 17 and under
* Ticket prices
  + For an adult: 30$
  + For a children: 15$person

**How the program should interact with the user:**

**PERSON 1**

**How old are you? 24**

**Another person (Y/N)? Y**

**[ ... ]**

**PERSON N**

**How old are you? 12**

**Another person (Y/N)? N**

**Person count: 2**

**Total:**