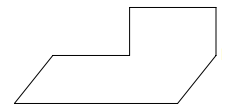
**Activity 13**

**\*Please draw a logical flowchart and then add the code in Java for each problem:\***



2

4

**1) Draw a logical flowchart for the following algorithm:**

* We want to calculate the perimeter of an irregular shape.

1

* The program must ask the length of each segment in cm.

7

5

* Then the program will give the total perimeter in cm for this shape.

6

* The program can have a maximum of 3 variables.

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

**Length of segment 1? \_\_**

**Length of segment 2? \_\_**

**Length of segment 3? \_\_**

**Length of segment 4? \_\_**

**Length of segment 5? \_\_**

**Length of segment 6? \_\_**

**Length of segment 7? \_\_**

**Perimeter (in cm) \_\_**

2) **Please draw a logical flowchart for this problem:**

* The software must ask 4 numbers to the user
* The software must say which number is the highest
* You are not allowed to use AND / OR in your decision elements in the flowchart
  + Each decision element must represent only one condition

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



**Enter Number 1 \_\_**

**Enter Number 2 \_\_**

**Enter Number 3 \_\_**

**Enter Number 4 \_\_**

**The biggest number is \_\_**

3) **Please draw a logical flowchart for this problem:**

* Let’s go back to the ticketing system problem.
* Each family can have one or more members.
* Depending on the day of the week, prices are not the same.
* Depending on the age of the person, prices are not the same.
* Price list:
  + Week days (Monday to Thursday)
    - Child: 15$
    - Adult: 20$
  + Friday night
    - Child: 25$
    - Adult: 30$
  + Weekends (Saturday and Sunday)
    - Child: 35$
    - Adult: 40$

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



**1: Mon 2: Tue 3: Wed**

**4: Thu 5: Fri 6: Sat**

**7: Sun**

**Which day are we? \_\_**

**How old is person 1? \_\_**

**Another person? Y**

**How old is person 2? \_\_**

**Another person? N**

**People count: \_\_**

**Total is: $\_\_\_\_\_**