Solve the following problems using Flowgorith. You can find the documentation on the following link:
http://www.flowgorithm.org/documentation/index.html .

Problem 1. Create a program that calculates the total number of diapers a daycare uses every day. The number of kids and diapers used per age can be found in the following tables:

Age	Kids enrolled
1 year	25
2 years	10
3 years	15

Age	Average diapers per day
1 year	6
2 years	4
3 years	2

When you run the program, it should display the following message:

```
> Diapers required per day: 220
```

Problem 2. Modify your program to allow the program to capture how many diapers the daycare has in storage. If the daycare will run out of diapers during the day, it should print a warning message:

```
> How many diapers do you have in storage?
> 5
> Diapers required per day: 220
> Warning! Buy more diapers!
```

```
> How many diapers do you have in storage?
> 230
> Diapers required per day: 220
```

Problem 3. A local mall wants to automate its parking payment process. They have defined the following rules:

   a. Cars will be charged 20 MXN for the first two hours of parking.
   b. Any additional hour (or fraction) will cost 3.5 MXN.
   c. If you park for <u>more than 24 hours</u>, you can pay a flat fee of 100 MXN.

Create a program that receives the minutes a car has been in parking, and calculates the payment required:

For example:

```
> How many minutes have you been parked?
> 190
> You owe 27.0 MXN.
```

```
> How many minutes have you been parked?
> 90
> You owe 20.0 MXN
```

```
> How many minutes have you been parked?
> 1500
> You owe 100 MXN
```

Bonus problem:

A group of friends want to celebrate Juan's birthday by having dinner at a restaurant. The group has agreed to split Juan's bill between everyone who will be able to attend. Help design a program that can calculate how much each friend must pay, considering that they also want to include a tip according to the following table:

Group size	Tip
2 - 5 friends	10%
6 - 10 friends	15%
10 or more	20%

Hint: http://www.flowgorithm.org/documentation/for.html

```
> Group size (including Juan)?
> 7
> Juan: 75
> Friend #1 spent: 100
> Friend #2 spent: 150
> Friend #3 spent: 65
> Friend #4 spent: 50
> Friend #5 spent: 50
> Friend #6 spent: 85

> Total cost, including tip: 661.25
> Each friend will pay: 110.2083 pesos
```