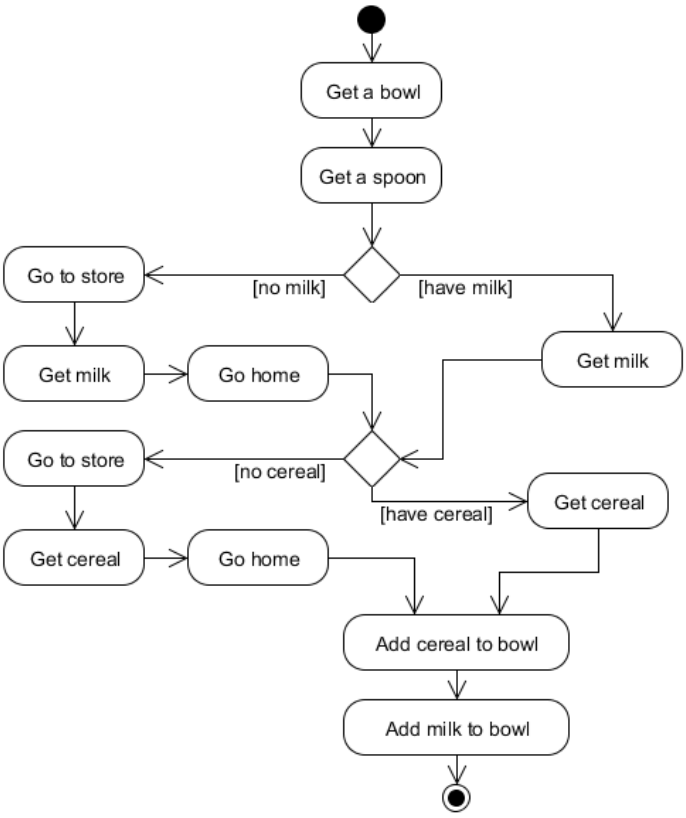
NOTE: I decided to change *Get milk at store* to more detailed form *Go to store, Get milk, Go home* because it makes graphs, pseudocodes more readable and with this statement I wouldn´t be able to make second task.

1. Modify the last bowl of cereal algorithm in the tutorial so that if there is no cereal we buy some at the store we buy some before continuing with the algorithm.

   (a) Express the revised algorithm using pseudocode.

```
01  Get a bowl
02  Get a spoon
03  If we have milk
04      Get milk
05  Otherwise
06      Go to store
07      Get milk
08      Go home
09  If we have cereal
10      Get cereal
11  Otherwise
12      Go to store
13      Get cereal
14      Go home
15  Add cereal to bowl
16  Add milk to bowl
```

   (b) Express the revised algorithm using a UML activity diagram.



2. Modify the algorithm you came up with in question 1 so that only one trip to the store would be necessary. Express your algorithm using either pseudocode or an activity diagram.

   (a) Express the revised algorithm using pseudocode.

```
01  Get a bowl
02  Get a spoon
03  If we have milk and cereal
04      Get milk
05      Get cereal
06  Otherwise
07      Go to store
08      If we have cereal and no milk
09          Get milk
10          Go home
11          Get cereal
12      If we have no milk and no cereal
13          Get cereal
14          Get milk
15          Go home
16      If we have milk and no cereal
17          Get cereal
18          Go home
```

19 Get milk
20 Add cereal to bowl
21 Add milk to bowl

(b) Express the revised algorithm using a UML activity diagram.