Lab – Nursery Rhymes

Sometimes we don't want an /exact/ copy of statements, but we want something very similar. We still use methods to reuse code, but we add **parameters** to the methods so that we can pass pieces of information to be used. We will practice this in this lab.

If you haven't noticed, many nursery rhymes are a tad repetitive. We are going to write code to produce a few popular nursery rhymes. However, even though the rhymes are repetitive, we are going to make sure our code is not. Yay!

1. You are to complete the three methods provided
2. You should invoke each of the methods (farm, monkeys, and hickory_dickory) one more time, with new parameters
3. Write the new methods described below

```
public class NurseryRhymes
{
   public static void main(String[] args)
   {
      farm("cow","moo");
      farm("duck","quack");
      //TODO: add another animal to the farm here
      monkeys(10);
      monkeys(9);
      //TODO: remove a monkey from the bed here
      hickory_dickory(1);
      hickory_dickory(2);
      //TODO: make the clock strike three here

      //TODO: call your new methods here (you must write them first!)
   }

   public static void farm(String animal, String sound)
   {
      //TODO: write your code here
   }

   public static void monkeys(int number)
   {
      //TODO: write your code here
   }

   public static void hickory_dickory(int time)
   {
      //TODO: write your code here
   }

   //TODO: add your new methods here
}
```

Your new methods should be:

1. a method called `milk`

The method should take an integer parameter that represents the number of bottles on the wall. i.e. If the call `milk(99)` was made, the results should be:

```
99 bottles of milk on the wall
99 bottles of milk
Take one down and pass it around
98 bottles of milk on the wall
```

2. a method called `hokey_pokey`
   The method should take a String parameter that represents a part of the body. i.e. If the call `hokey_pokey("booty")` is made, the result should be:

```
You put your booty in
You put your booty out
You put your booty in
And you shake it all about
You do the Hokey Pokey
And you turn yourself about
That's what it's all about!
```

3. a method called `bingo`
   The method should take a String parameter that represents the "bingo" part of the song. i.e. If the call `bingo("(clap)-I-N-G-O")` is made, the result should be:

```
There was a farmer who had a dog
And Bingo was his name-o
(clap)-I-N-G-O
(clap)-I-N-G-O
(clap)-I-N-G-O
And Bingo was his name-o
```

4. a method called `frogs`
   The method should take an integer parameter that represents the number of speckled frogs sitting on the log. i.e. If the call `frogs(3)` is made, the result should be:

```
3 little speckled frogs
sitting on a speckled log
eating the most delicious bugs
yum, yum
one jumped into the pool
where it is nice and cool
now there are 2 little speckled frogs!
ribbit, ribbit
```

Sample output:

```
Old MacDonald had a farm
e-i-e-i-o
And on that farm he had a cow
e-i-e-i-o
With a moo moo here
And a moo moo there
Here a moo, there a moo
Everywhere a moo moo
Old MacDonald had a farm
e-i-e-i-o
```

Old MacDonald had a farm
e-i-e-i-o
And on that farm he had a duck
e-i-e-i-o
With a quack quack here
And a quack quack there
Here a quack, there a quack
Everywhere a quack quack
Old MacDonald had a farm
e-i-e-i-o

10 little monkeys jumping on the bed
One fell off and bumped his head
Mama called the doctor, and the doctor said
"No more monkeys jumping on the bed!"

9 little monkeys jumping on the bed
One fell off and bumped his head
Mama called the doctor, and the doctor said
"No more monkeys jumping on the bed!"

Hickory dickory dock
The mouse ran up the clock
The clock struck 1
The mouse ran down
Hickory dickory dock

Hickory dickory dock
The mouse ran up the clock
The clock struck 2
The mouse ran down
Hickory dickory dock