

Solution 2: Give me your feature name and I'll call you

ETH Zurich

1 Zurich needs more stations

Listing 1: More feature calls

```
explore
-- Modify the map.
do
  Zurich.add_station ("Zoo", 1600, 500)
  Zurich.connect_station (6, "Zoo")
  Zurich_map.update
  Zurich_map.fit_to_window

  wait (3)
  Zurich_map.station_view (Zurich.station ("Zoo")).highlight
  wait (1)
  Zurich_map.station_view (Zurich.station ("Zoo")).unhighlight
  wait (1)
  Zurich_map.station_view (Zurich.station ("Zoo")).highlight
  wait (1)
  Zurich_map.station_view (Zurich.station ("Zoo")).unhighlight
  wait (1)
  Zurich_map.station_view (Zurich.station ("Zoo")).highlight
  wait (1)
  Zurich_map.station_view (Zurich.station ("Zoo")).unhighlight
end
```

2 Introducing yourself

Listing 2: Introduction

```
execute
-- Run application.
do
  Io.put_string ("Name: ")
  Io.put_string ("John Smith")
  Io.new_line
  Io.put_string ("Age: ")
  Io.put_integer (20)
  Io.new_line
  Io.put_string ("Mother tongue: ")
  Io.put_string ("English")
  Io.new_line
  Io.put_string ("Has a cat: ")
```

```
Io.put_boolean (True)  
end
```

3 Command or Query?

1. *name* is a query.
2. *buildings* is a query.
3. *add_line* is a command.
4. *connecting_lines* is a query.
5. *move_all* is a command.
6. *north* is a query.

4 MOOC: Objects and Classes

The order in which the questions and the answers appear here in the solution may vary because they are randomly shuffled at each attempt.

- One class is a template for defining a set of possible objects.
- Each object is an instance of its generating class.
- While classes exist only in the software text, objects exist during execution as well.
- In software text objects are visible and represented by names denoting run-time instances of classes.
- One class represents a category of things. One object represents one of these things.