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

ETH Zurich

1 Adding more feature calls

Listing 1: More feature calls

```plaintext
explore is
  -- Show city info and a route.
  do
    Paris.display
    -- Louvre.spotlight
    -- Line8.highlight
    -- Route1.animate
    -- Console.show (Route1.origin)
    Station_invalides.highlight
    short.wait
    line_section (Line8, Station_invalides, Station_concorde).highlight
    short.wait
    Station_concorde.highlight
    short.wait
    line_section (Line1, Station_palais_royal_musee_du_louvre, Station_concorde).
    highlight
    short.wait
    Station_palais_royal_musee_du_louvre.highlight
    short.wait
  end
```

2 Introducing yourself

Listing 2: Introduction

```plaintext
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)
```
3 Command or Query?

1. `is_exchange` is a query.
2. `set_location` is a command.
3. `outgoing_line_connections` is a query.
4. `name` is a query.
5. `highlight` is a command.
6. `has_stop` is a query.

4 Valid feature call instructions

1. This is invalid code: The command `show` can only be followed by arguments, it is not possible to call another feature on a command.
2. This is valid code: The target is `Station_balard` and the argument is a valid expression.
3. This is invalid code: The argument `Line8.highlight` contains a command and thus is invalid.
4. This is valid code: The target is `Line2.city` and the argument is a valid expression.
5. This is valid code: The target is `Console` and the argument is composed only of queries.
6. This is valid code: The target is `Console` and the argument is composed only of queries (with nested arguments).
7. This is invalid code: The argument contains the command `set_location`.

end