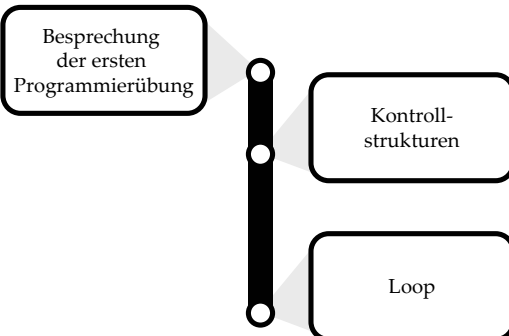


Montag, 17. November



Ordering

```
explore is
-- Explore the map with changed order.
do
  Paris.display
  Line8.highlight
  Louvre.spotlight
  Route1.animate
  Console.show ( Route1.origin )
end
```

Output

```
Console.show ( Console )
Console.show ( Paris )
Console.show ( Louvre )
Console.show ( Line8 )
Console.show ( Route1 )
```

Console: text window shown on the bottom of the Traffic application
Paris: It is the capital of France. In 1995, the population of the Paris metropolitan area (Ile-de-France) was estimated at 10,982,000 inhabitants.
Louvre: one of the most famous monuments of Paris
Line 8: from Balard to Creteil-Prefecture
Route1: Route going from Porte Dauphine to Gare de Lyon

Changing the stations

```
explore is
-- Explore the map with changed order.
do
  Route1.set_source ( Station_Gare_de_Lyon )
  Route1.set_destination ( Station_Madeleine )
  Paris.display
  Line8.highlight
  Louvre.spotlight
  Route1.animate
  Console.show ( Route1.origin )
end
```

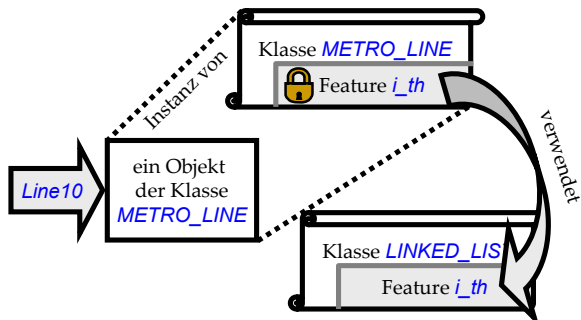
Das Feature `set_source` ist in der Klasse `ROUTE1`.

Contracts testen

```
start is
-- Test program behaviour with and without contracts.
do
  ① Console.show( Line10.i_th ( -1 ) )
  ② Console.show( Line10.i_th ( 1 ) )
  ③ Console.show( Line10.i_th ( Line10.count - 1 ) )
  ④ Console.show( Line10.i_th ( Line10.count ) )
  ⑤ Console.show( Line10.i_th ( Line10.count + 1 ) )
end
```

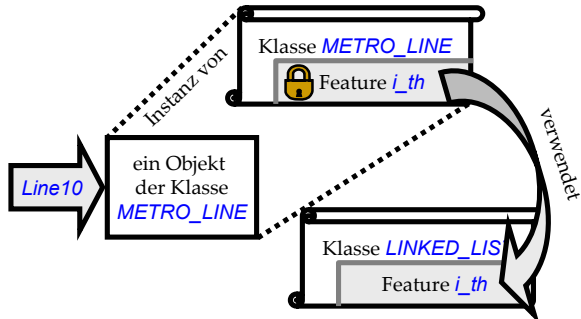
Was passiert mit Contracts?

② `Console.show( Line10.i_th ( 1 ) )`



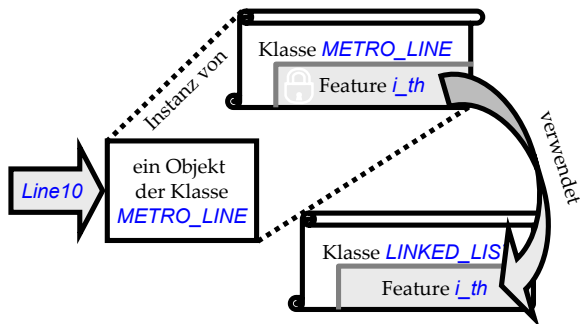
Was passiert mit Contracts?

1 `Console.show( Line10.i_th ( -1 ) )`



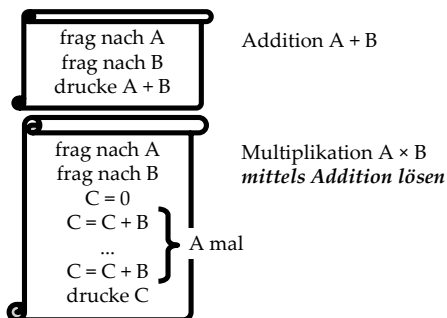
Was passiert ohne Contracts?

1 `Console.show( Line10.i_th ( -1 ) )`

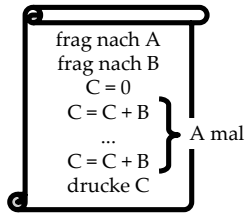


Kontrollstrukturen

Programm = Abfolge von Befehlen
Kontrollstrukturen steuern den Programmablauf



Kontrollstrukturen in Eiffel



```
from      c := 0
until     a = 0
loop      c := c + b
          a := a - 1
end
```
