

Main program:

Repair = rec(name : String, cost : N
, above95: N)

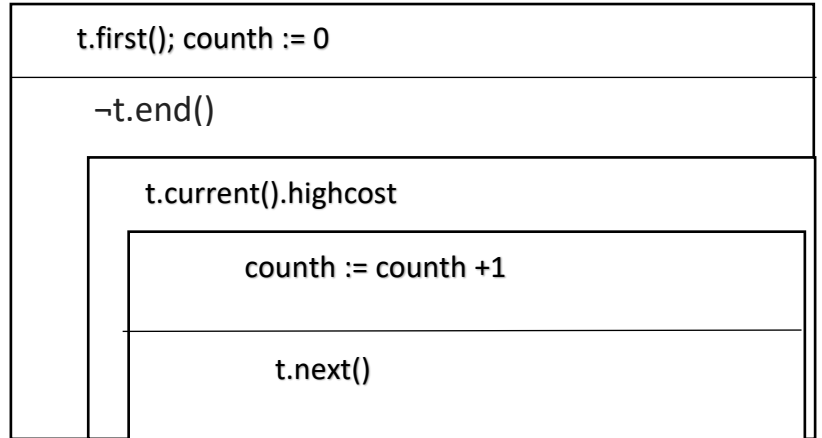
CustomerLine = rec(customer: String,
counter : N, highcostcounter : N)

Output = rec(name : String, highcost : L)

A = (t : enor(Output), counth : N)

Pre = (t = t')

Post = (counth = $\sum_{e \in t'} 1 \text{ (e.highcost)}$)

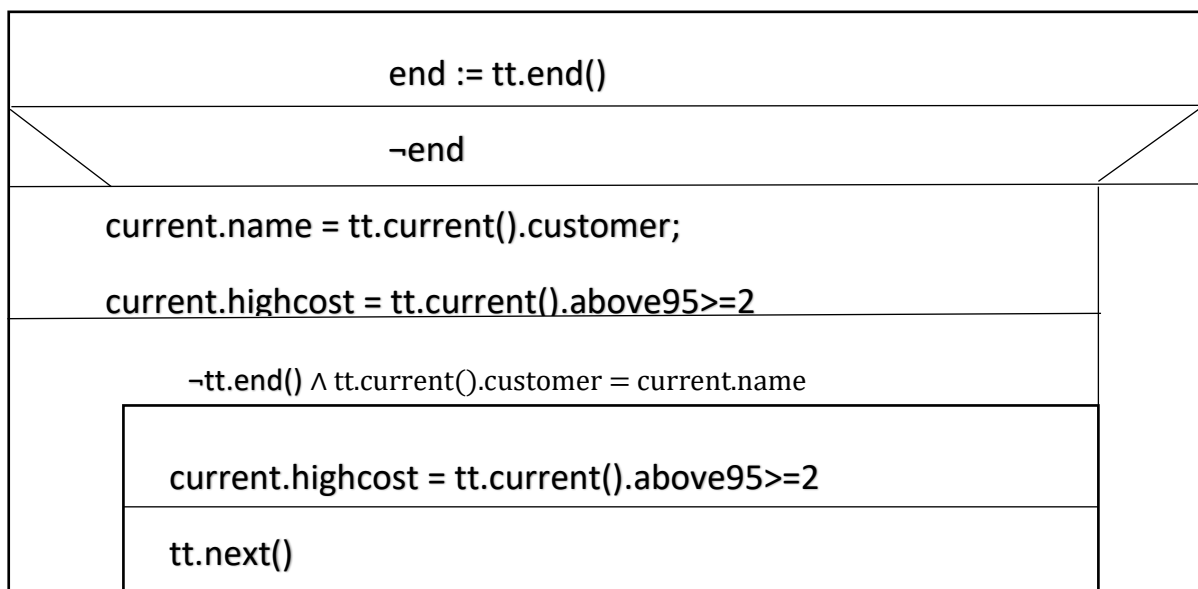
**Enumerator of Outputs**

| enor(Output) | first(), next(), current(), end() |
|------------------|-----------------------------------|
| tt: enor(Repair) | first() ~ tt.first(); tt.next() |
| current : Output | next() ~ see below |
| end : L | current() ~ current |
| | end() ~ end |

$A^{\text{next}} = (\text{tt: enor(Repair)}, \text{end} : L, \text{current} : \text{Output})$

$\text{Pre}^{\text{next}} = (\text{tt} = \text{tt}^1)$

$\text{Post}^{\text{next}} = (\text{end} = \text{tt.end()} \wedge \neg \text{end} \rightarrow \text{current.highcost} = \text{SEARCH}_{e \in t'} (e.\text{above95} \geq 2))$



Enumerator of repairs

| enor(Repair) | first(),next(),current(),end() |
|---|--|
| f : infile(Line) current : Repair end : L | first() ~ see below next() ~ see below current() ~ current end() ~end |

In enor(Repair), operations first() and next() are the same. They have to solve the following task: read the next line of the textfile (f sequential input file). If there is no more, then variable end gets true. If there is any, the current customer's name and the cost can be extracted. Then, the summation of cost" species can be counted in the above95..

$A_{next} = (f: \text{infile}(\text{Line}), \text{cur} : \text{Repair}, \text{end} : \mathbb{L})$

$Pre_{next} = (f = f')$

$Post_{next} = (sf, df, f = \text{read}(f') \wedge \text{end} = (sf=abnorm) \wedge \neg \text{end} \rightarrow \text{cur.name} = df.name \wedge \text{cur.cost} = df.cost \wedge \text{cur.above95} = \sum ((\sum \text{cur.cost}) > 95)? 1 : 0]$