```
>- AGoal
  |- AStatCommands
  | `- AImportStatement
  |    `- AModuleStatement
  |       `- AIdentifier
  |          `- os
  |- AStatCommands
  | `- AFromStatement
  |    |- AModuleStatement
  |    | `- AIdentifier
  |    |    `- datetime
  |    `- AIdentifier
  |       `- date
  |- AFuncCommands
  | `- AFunction
  |    |- AIdentifier
  |    | `- fib
  |    |- AArgument
  |    | `- AIdentifier
  |    |    `- n
  |    `- AAssignmentStatement
  |       |- AIdentifier
  |       | `- a
  |       `- ANumberArithmetics
  |          `- AIntNumber
  |             `- 0
  |- AStatCommands
  | `- AAssignmentStatement
  |    |- AIdentifier
  |    | `- b
  |    `- ANumberArithmetics
  |       `- AIntNumber
  |          `- 1
  |- AStatCommands
  | `- AIfStatement
  |    |- AAndComparisonLvlFour
  |    | |- ANotComparisonLvlFour
  |    | | `- ARule1ComparisonLvlFour
  |    | |    |- AIdentifierArithmetics
  |    | |    | `- AIdentifier
  |    | |    |    `- a
  |    | |    `- AIdentifierArithmetics
  |    | |       `- AIdentifier
  |    | |          `- b
  |    | `- ARule2ComparisonLvlFour
  |    |    `- true
  |    `- APrintStatement
  |       `- ANumberArithmetics
  |          `- AIntNumber
  |             `- 0
```

```
|- AStatCommands
|  `- AWhileStatement
|     `- ARule3ComparisonLvlFour
|        `- false
|- AStatCommands
|  `- APrintStatement
|     `- AIdentifierArithmetics
|        `- AIdentifier
|           `- a
|- AStatCommands
|  `- AAssignmentStatement
|     |- AIdentifier
|     |  `- a
|     `- AIdentifierArithmetics
|        `- AIdentifier
|           `- b
|- AStatCommands
|  `- AAssignmentStatement
|     |- AIdentifier
|     |  `- b
|     `- ADivArithmetics
|        |- AMultArithmetics
|        |  |- AArithmeticsArithmetics
|        |  |  `- AMinusArithmetics
|        |  |     |- AIdentifierArithmetics
|        |  |     |  `- AIdentifier
|        |  |     |     `- a
|        |  |     `- AIdentifierArithmetics
|        |  |        `- AIdentifier
|        |  |           `- b
|        |  `- AArithmeticsArithmetics
|        |     `- APlusArithmetics
|        |        |- AIdentifierArithmetics
|        |        |  `- AIdentifier
|        |        |     `- a
|        |        `- AIdentifierArithmetics
|        |           `- AIdentifier
|        |              `- b
|        `- AExpArithmetics
|           |- AIdentifierArithmetics
|           |  `- AIdentifier
|           |     `- b
|           `- AArithmeticsArithmetics
|              `- ADivArithmetics
|                 |- AIdentifierArithmetics
|                 |  `- AIdentifier
|                 |     `- a
|                 `- AIdentifierArithmetics
|                    `- AIdentifier
|                       `- b
```

```
|- AStatCommands
|  `- AAssignmentStatement
|     |- AIdentifier
|     |  `- a
|     `- AMaxminArithmetics
|        |- AIdentifierArithmetics
|        |  `- AIdentifier
|        |     `- a
|        `- ACommaExpr
|           `- AIdentifierArithmetics
|              `- AIdentifier
|                 `- b
|- AStatCommands
|  `- AAssertStatement
|     |- APlusArithmetics
|     |  |- ANumberArithmetics
|     |  |  `- AIntNumber
|     |  |     `- 0
|     |  `- ANumberArithmetics
|     |     `- AIntNumber
|     |        `- 1
|     `- AAssertStatement
|        |- AMinusArithmetics
|        |  |- ANumberArithmetics
|        |  |  `- AIntNumber
|        |  |     `- 1
|        |  `- ANumberArithmetics
|        |     `- AIntNumber
|        |        `- 0
|        |- ACommaExpr
|        |  `- AStrlitArithmetics
|        |     `- "pog"
|        `- AAssignmentStatement
|           |- AIdentifier
|           |  `- l
|           `- AListArithmetics
|              `- AArgList
|                 |- ANumberArithmetics
|                 |  `- AIntNumber
|                 |     `- 1
|                 |- ACommaExpr
|                 |  `- ANumberArithmetics
|                 |     `- AIntNumber
|                 |        `- 2
|                 `- ACommaExpr
|                    `- ANumberArithmetics
|                       `- AIntNumber
|                          `- 3
|- AStatCommands
|  `- AListassignmentStatement
```

```
|     |- AIdentifier
|     |  `- l
|     |- ANumberArithmetics
|     |  `- AIntNumber
|     |     `- 2
|     `- AMinusArithmetics
|        |- AIdentifierArithmetics
|        |  `- AIdentifier
|        |     `- b
|        `- ANumberArithmetics
|           `- AIntNumber
|              `- 1
|- AStatCommands
|  `- APrintStatement
|     |- AListcallArithmetics
|     |  |- AIdentifier
|     |  |  `- l
|     |  `- ANumberArithmetics
|     |     `- AIntNumber
|     |        `- 0
|     `- ACommaExpr
|        `- ALenArithmetics
|           `- AIdentifierArithmetics
|              `- AIdentifier
|                 `- l
|- AStatCommands
|  `- AForStatement
|     |- AIdentifier
|     |  `- i
|     |- AIdentifier
|     |  `- l
|     `- APrintStatement
|        `- AIdentifierArithmetics
|           `- AIdentifier
|              `- i
|- AStatCommands
|  `- AMinusassignmentStatement
|     |- AIdentifier
|     |  `- b
|     `- AIdentifierArithmetics
|        `- AIdentifier
|           `- a
|- AStatCommands
|  `- AReturnStatement
|     `- AIdentifierArithmetics
|        `- AIdentifier
|           `- b
|- AFuncCommands
|  `- AFunction
|     |- AIdentifier
```

```
|     |  `- funcwithdef
|     |- AArgument
|     |  |- AIdentifier
|     |  |  `- name
|     |  `- AMoreAssignments
|     |     |- AIdentifier
|     |     |  `- university
|     |     `- AAssignValue
|     |        `- AStrlitArithmetics
|     |           `- "aueb"
|     `- APrintStatement
|        |- AIdentifierArithmetics
|        |  `- AIdentifier
|        |     `- name
|        |- ACommaExpr
|        |  `- AStrlitArithmetics
|        |     `- " studies in "
|        `- ACommaExpr
|           `- AIdentifierArithmetics
|              `- AIdentifier
|                 `- university
`- AStatCommands
   `- APrintStatement
      `- AFunctionArithmetics
         `- AFunctionCall
            |- AIdentifier
            |  `- fib
            `- AArgList
               `- ANumberArithmetics
                  `- AIntNumber
                     `- 3
```