**Types:**

* Compile-time fix size

**Scope rule:**

* Method can be called only after it’s header
* Shadowing

**Location:**

* No default value for locations

**Assignment:**

* =copying + can also copy arrays

**Method invocation and return:**

* Evaluation of arguments from left to right
* Illegal to reach the textual end when have return

**Semantic rules:**

* no identifier **defined twice** in the same scope
* no … **used before declared**
* **contains void main() unique**
* **no function defined after main will be executed**
* integer in array declaration must be **> 0**
* **number** and **type** of actual arguments must be as same as …
* **if method** used in a expression **must return result**
* **return -** if has value must be in body of a function which returns the same type value
* id as location must be …
* for id as <id>[expr]…[expr] expr must be int and id must be of array type
* expr in if must be of type Boolean
* operands of **arith\_ops** must be of **int** or **flaot**
* operands of **rel\_ops** must be of **int**, **float** or **char**
* operands of **eq\_ops** must **have same type** and must be of **int**, **float, boolean** or **char**
* operands of **conditional\_ops or “!”** must be of **boolean**
* **in assignment both sides must have the same type**
* expr for “for” must be of type Boolean
* all break and continues must be in body of **while** or **for**

**run-time checking:**

**….**