

pd2 hw022 2022/10/27

Tianlang

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worked with no one; advised by contributors on Piazza

Declaration semantics:

The compiler recognizes the datatype and writes bytecode which causes the JVM to reserve a certain amount of memory based on the datatype. If the variable is a field, it is initialized with a zero-like value. The name becomes associated with a chunk of memory.

Assignment semantics:

The JVM copies the value of the expression on the RHS and stores that value into the chunk of memory associated with the variable on the LHS

Retrieval semantics:

When Java retrieves the value of a variable in an expression, Java finds the chunk of memory allocated to that variable and replaces the variable with the value stored in the reference.