Statement Semantics

- The meaning function of statement is a function that can produce another state by given a state.
- This function can be implemented as a function taking two parameters, a statement $s$, and a state.
- Skip semantics
  - The meaning function of a skip statement is an identity function on the state
- Assignment Semantics
  - Overriding Union
    - The meaning of an Assignment is to calculate the value of the source expression based on the current state and replace the value of target variable by the calculated value.
  - Assignment semantics of C and Java
    - In control flow statement, C treats assignment as expression, while Java does not.
  - Copy semantics vs. Reference semantics