**Array Bound Checker – Formal description**

Abstract domain: Intervals Domain as described in lectures.

Transformers:

We use as defined in lecture 6, where defined as follows:

**Assignment:**

Above, is an expression which in big step semantics evaluates to using mathematical operators.

Mathematical operators in the abstract domain defined as:

Where:

* + If
    - Where c’ = (If
  + Else

**Boolean Operations:**

<TBD Haggai>