Notation

Given a set A we denote by A^*
the set of finite sequences of elements in A, i.e.:
$$A^* = \{\, a_1 \cdots a_n \;\mid\; n \geq 0 \wedge a_1, ..., a_n \in A \,\}$$
We denote the empty sequence by $\epsilon \in A^*$

For example:
$$A = \{\, a, b \,\} \qquad A^* = \{\, \epsilon, a, b, aa, ab, ba, bb, aaa, aab, ... \,\}$$