L4

$\sum = \{a, b, c\}$

Σ^* denotes all strings that can be formed using Σ

Hence a language is any set of strings over an alphabet Σ that is any subset of Σ^*. Hence Σ^*, Σ, and ϕ also are languages

Most of the languages are infinite
Ex. List all binary strings formed over $\{0, 1\}$
It is not possible
$L = \{w : w \in \Sigma^*\}$
The general form is $L = \{w : w \in \Sigma^* and\ w\ has\ property\ P\}$