



## 2. Lexical Analysis

Andrea Polini

Formal Languages and Compilers  
Master in Computer Science  
University of Camerino

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# Regular definitions

For notational convention we give names to certain regular expressions A regular definition, on the alphabet  $\Sigma$  is sequence of definition of the form:

$$d_1 \rightarrow r_1$$
$$d_2 \rightarrow r_2$$

...

$$d_n \rightarrow r_n$$

So token of a language can be defined as:

$$\textit{letter} \rightarrow A|B|\dots|Z|a|b|\dots|z$$
$$\textit{digit} \rightarrow 0|1|\dots|9$$
$$\textit{Identifier} \rightarrow \textit{letter}(\textit{letter}|\textit{digit})^*$$
$$\textit{Integer} \rightarrow \dots$$