

Lexemes and Tokens for C_b

Please refer to Lecture 4 slides for the extended regular expression syntax. The characters in **orange monospace** are characters that appear verbatim in the concrete syntax. The tokens are in **<blue sans-serif>**, surrounded with angle brackets. Any extra data stored in the token appears after the token type. For example, “<ID,string>” is a token with type “ID” and a string payload.

Lexemes	Token
<code>[a-zA-Z][0-9a-zA-Z]*</code>	<ID,string>
<code>-?[0-9]+</code>	<NUM,integer>
<code>int</code>	<TYPE,"int">
<code>if</code>	<IF>
<code>else</code>	<ELSE>
<code>while</code>	<WHILE>
<code>for</code>	<FOR>
<code>from</code>	<FROM>
<code>to</code>	<TO>
<code>def</code>	<DEF>
<code>return</code>	<RETURN>
<code>output</code>	<OUTPUT>
<code>(</code>	<LPAREN>
<code>)</code>	<RPAREN>
<code>[</code>	<LBRACKET>
<code>]</code>	<RBRACKET>
<code>{</code>	<LBRACE>
<code>}</code>	<RBRACE>
<code>;</code>	<SEMICOLON>
<code>:=</code>	<ASSIGN>
<code>:</code>	<HATYPE>
<code>,</code>	<COMMA>
<code>!</code>	<LNEG>
<code>+,*,-</code>	<AOP,operator> where operator is one of +,*,-
<code><,<=,=</code>	<ROP,operator> where operator is one of <,<=,=
<code>&&, </code>	<LBINOP,operator> where operator is one of and, or
<code>[\\n\\t]+</code>	whitespace, no token
<code>/*.*\\n</code>	comment, no token