



Iasi, October 3<sup>rd</sup>, 2016

## Pseudo-code language in a nutshell

1. assignment       $\langle \text{variable} \rangle \leftarrow \langle \text{expression} \rangle$
2. if  

<b>if</b> $\langle \text{expression} \rangle$ <b>then</b> $\langle \text{instruction}_1 \rangle$ <b>else</b> $\langle \text{instruction}_2 \rangle$	<b>if</b> $\langle \text{expression} \rangle$ <b>then</b> $\langle \text{instruction}_1 \rangle$
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3. while  
    **while**  $\langle \text{expression} \rangle$  **do**  
         $\langle \text{instruction} - \text{sequence} \rangle$
4. repeat  
    **repeat**  
         $\langle \text{instruction} - \text{sequence} \rangle$   
    **until**  $\langle \text{expression} \rangle$ ;
5. for  

<b>for</b> $\langle \text{variable} \rangle \leftarrow \langle \text{expression}_1 \rangle$ <b>to</b> $\langle \text{expression}_2 \rangle$ <b>do</b> $\langle \text{instruction} - \text{sequence} \rangle$	<b>for</b> $\langle \text{variable} \rangle \leftarrow \langle \text{expression}_1 \rangle$ <b>downto</b> $\langle \text{expression}_2 \rangle$ <b>do</b> $\langle \text{instruction} - \text{sequence} \rangle$
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6. return      **return** [ $\langle \text{expression} \rangle$ ]
7. input      **read**  $\langle \text{variable} \rangle, \dots$
8. output      **print**  $\langle \text{expression} \rangle, \dots$
9. procedures  

<b>procedure</b> <i>name (formal-parameter-list)</i> <b>begin</b> $\langle \text{instruction} - \text{sequence} \rangle$ <b>end</b>  <b>function</b> <i>name (formal-parameter-list)</i> <b>begin</b> $\langle \text{instruction} - \text{sequence} \rangle$ <b>return</b> $\langle \text{expression} \rangle$ <b>end</b>	<b>call:</b> <i>name(actual - parameter - list)</i>  the body of a <b>function</b> contains at least one <b>return</b> $\langle \text{expression} \rangle$ instruction.
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