Transparent Standby for Low-Power, Resource-Constrained Embedded Systems

A Programming Language-Based Approach

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3. Provide standby mechanisms at the **programming language** level that scale to all applications.
4. Support **transparent**/non-intrusive standby mechanisms that reduce barriers of adoption.

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- Put device to sleep
- Only awake from interrupts

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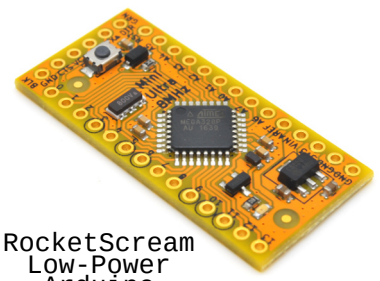

RocketScream
Low-Power
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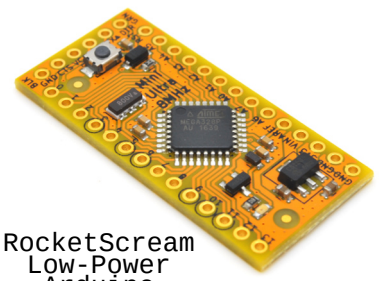

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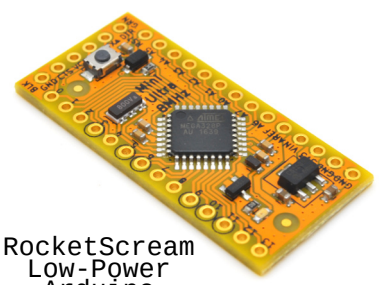

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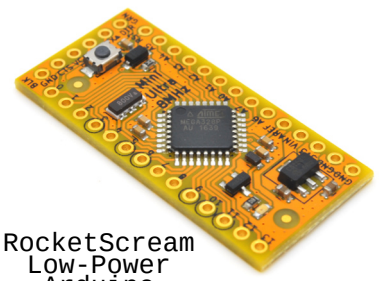

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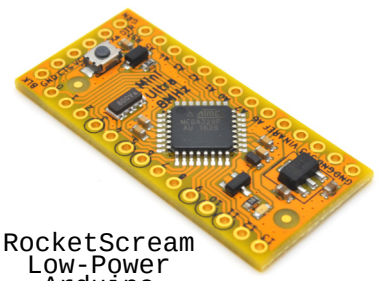

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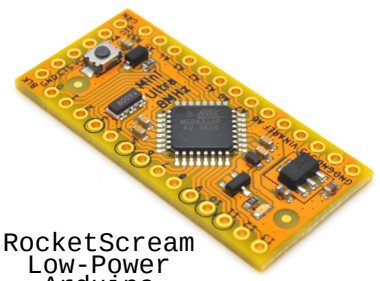

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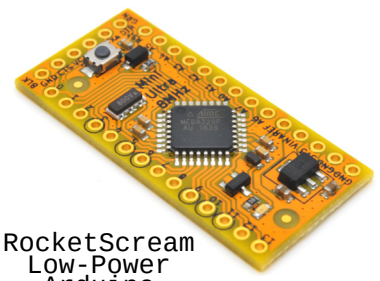


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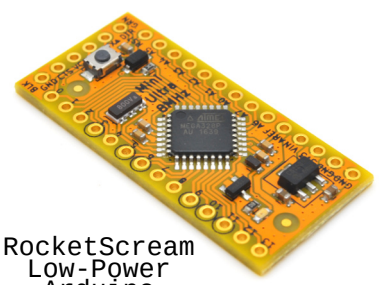

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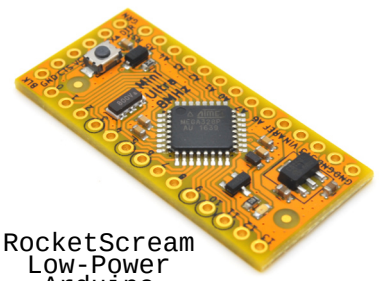

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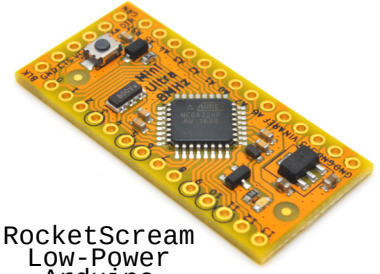

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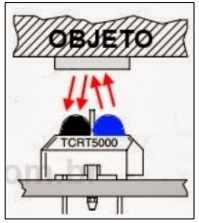


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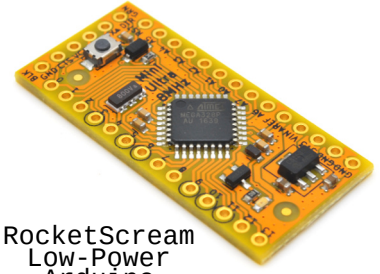

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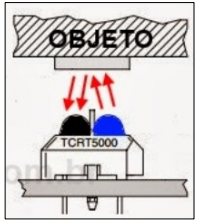


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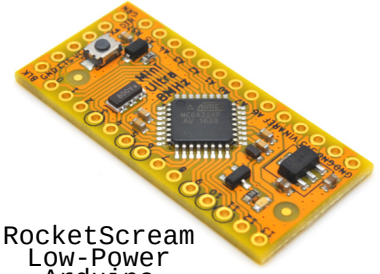

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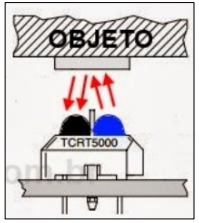


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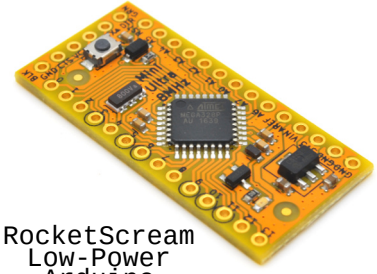

RocketScream
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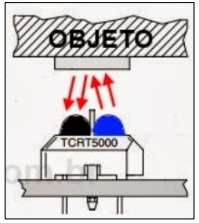


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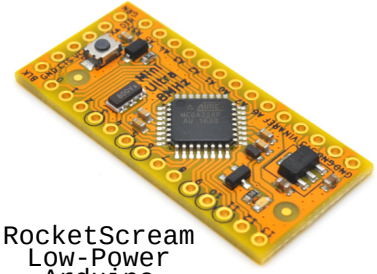

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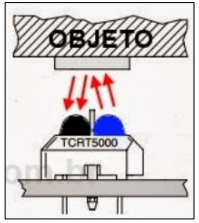


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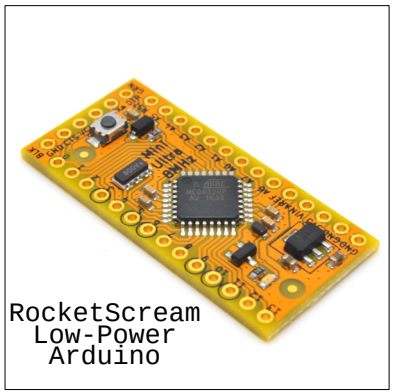

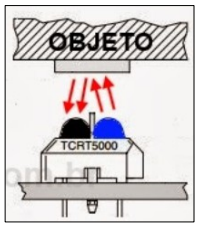


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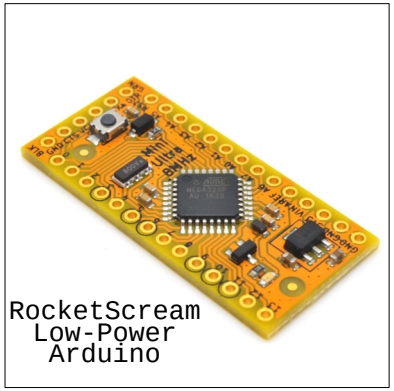

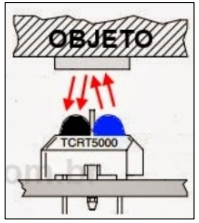

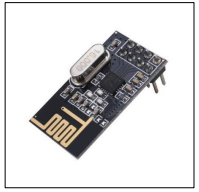

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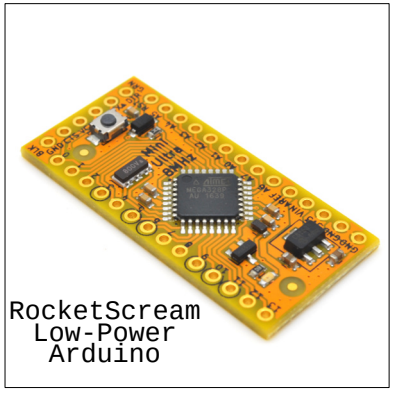

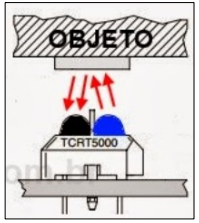

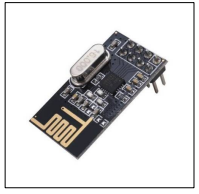

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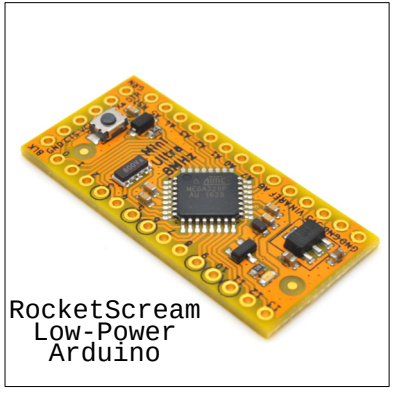

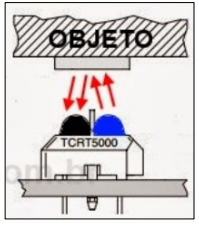

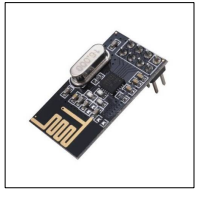

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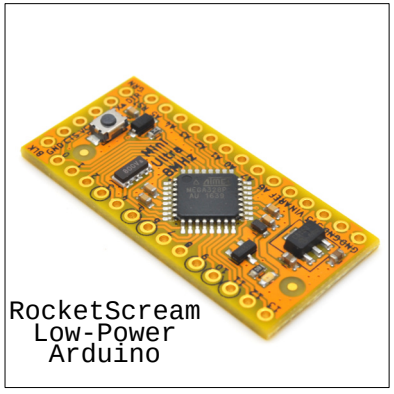

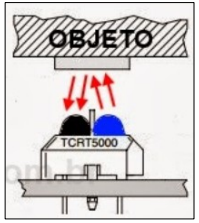

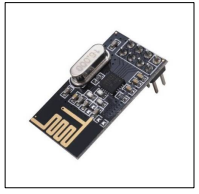

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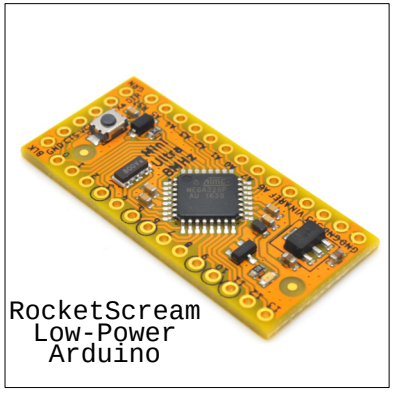

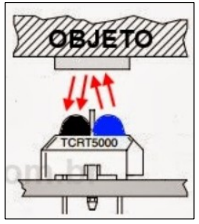

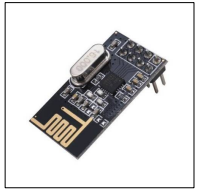

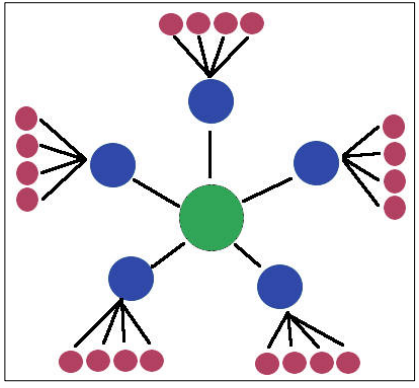

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(standby, constrained, programming language, transparent)

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Transparent Standby for Low-Power, Resource-Constrained Embedded Systems

A Programming Language-Based Approach

www.ceu-lang.org

Francisco Sant'Anna

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Standby Efficiency for IoT

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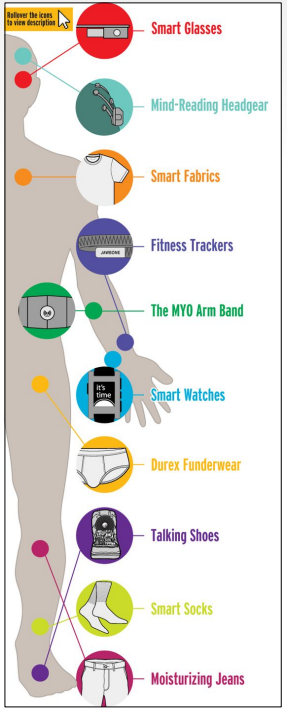

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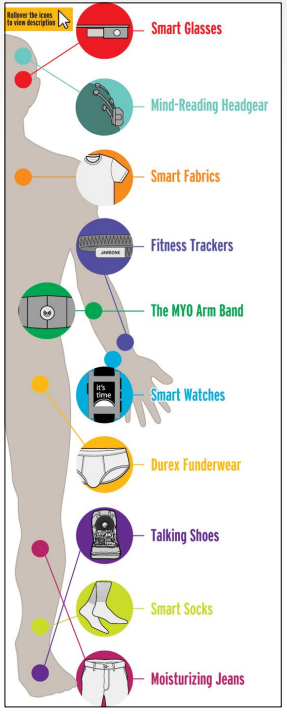

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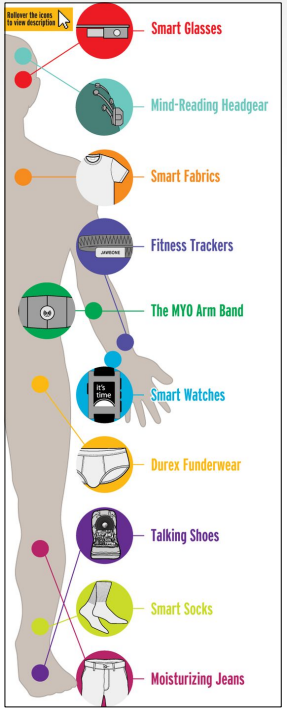

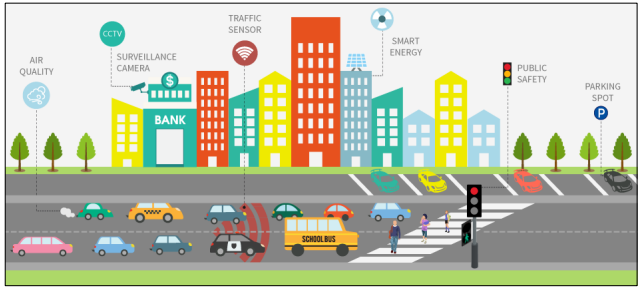

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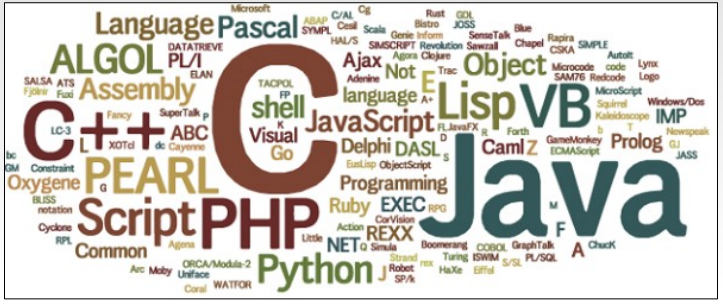

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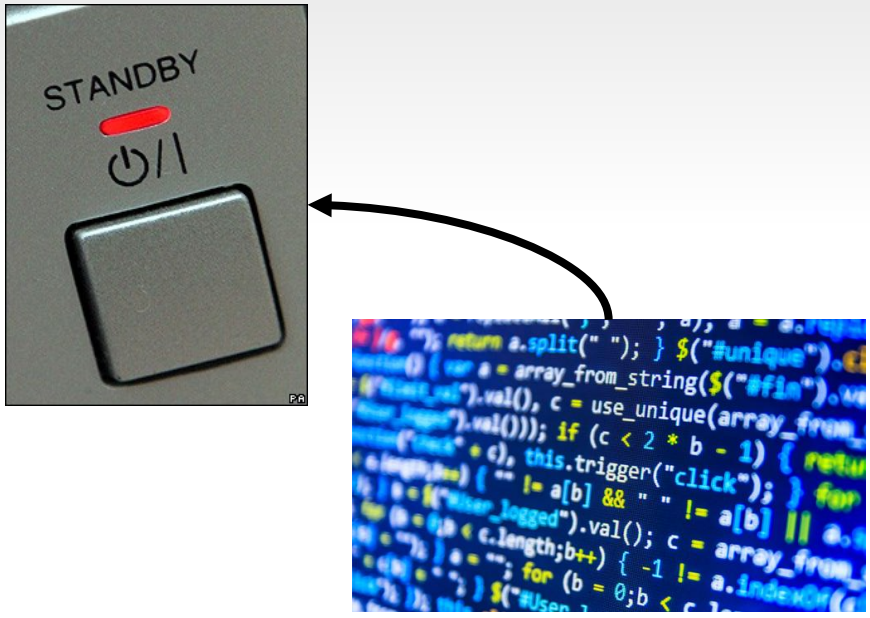

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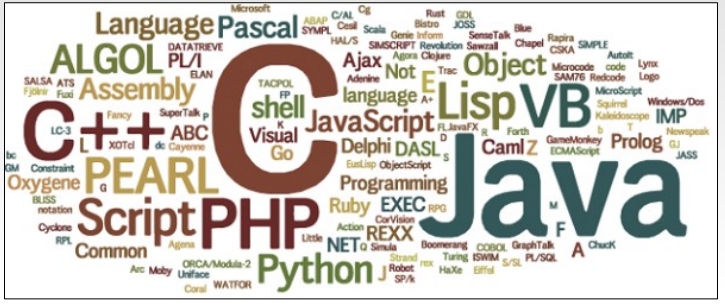

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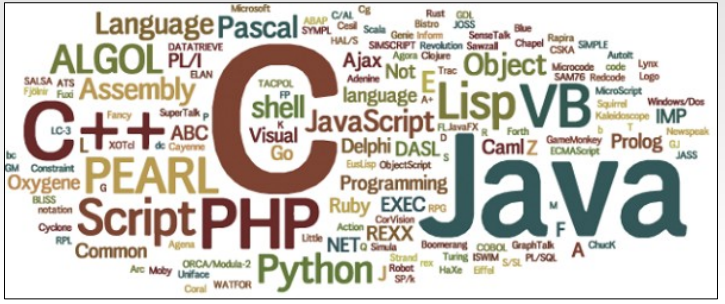

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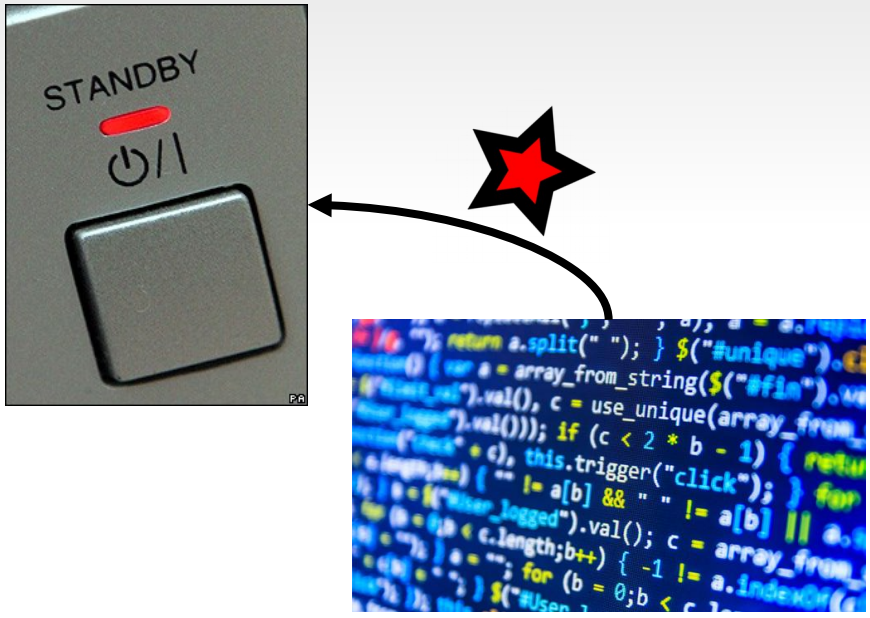

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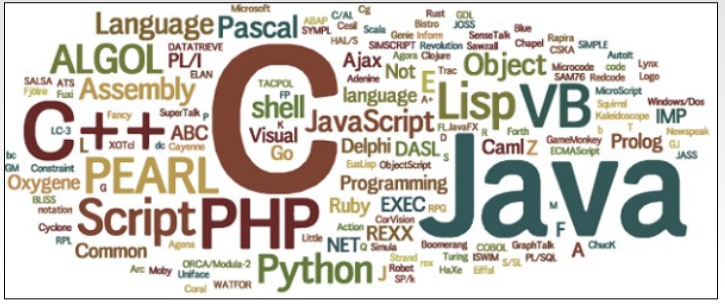

Current languages have not been designed with energy efficiency in mind!

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  - always yields the same outcome for a given timeline

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