Ήχος στο Διαδίκτυο

Υλοποίηση Ηχητικών Εφέ με Web Audio API

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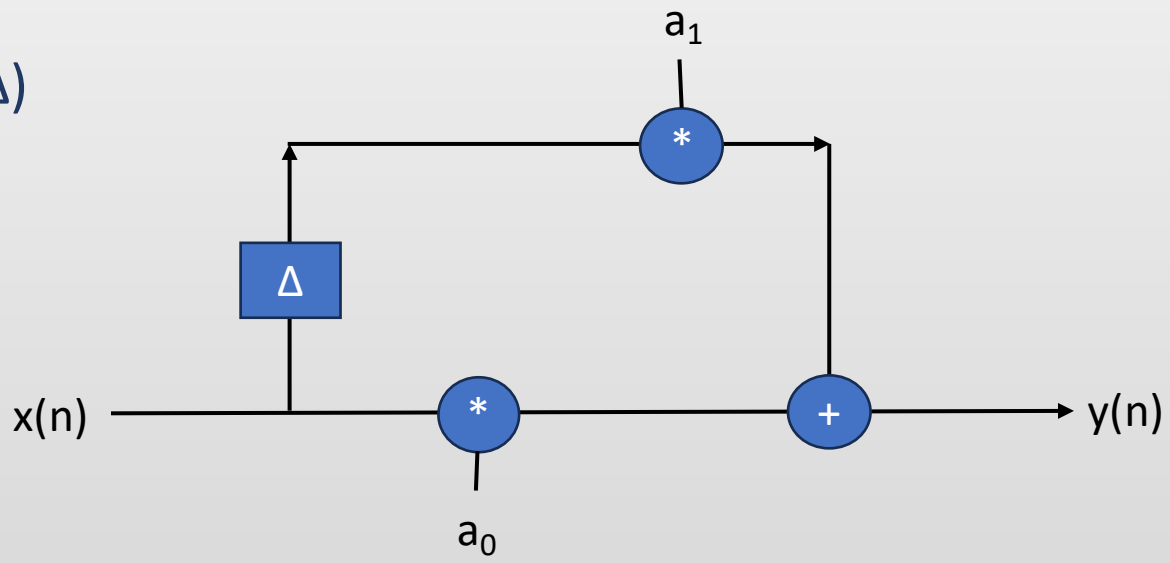
Overview

- Implementation of FIR using DelayNode
- Implementation of IIR using IIRFilterNode

Finite Impulse Response

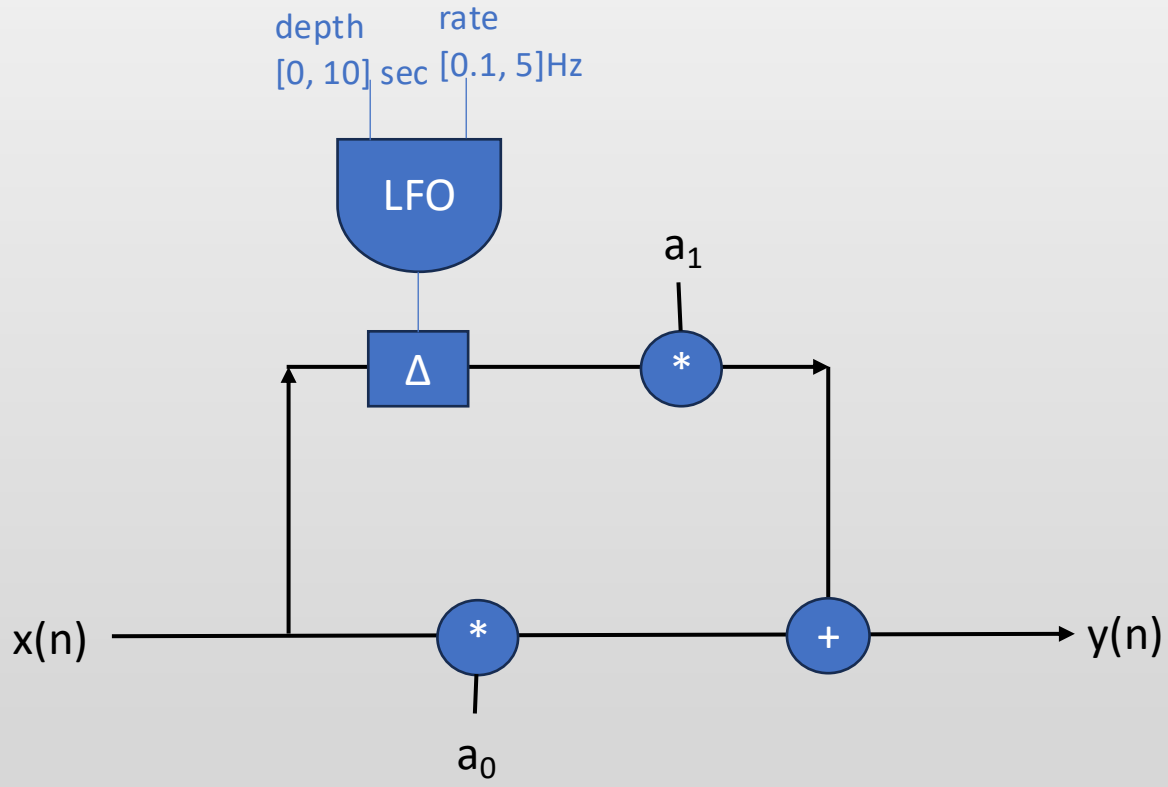
- Difference Equation
  - $y(n) = a_0\, x(n) + a_1 x(n-\Delta)$
- Flowchart



- You need:
  1. Source node,
  2. DelayNode
  3. GainNode for dry coef
  4. Gain Node for wet coef
  5. Destination

Flanger = FIR Filter with variable Delay

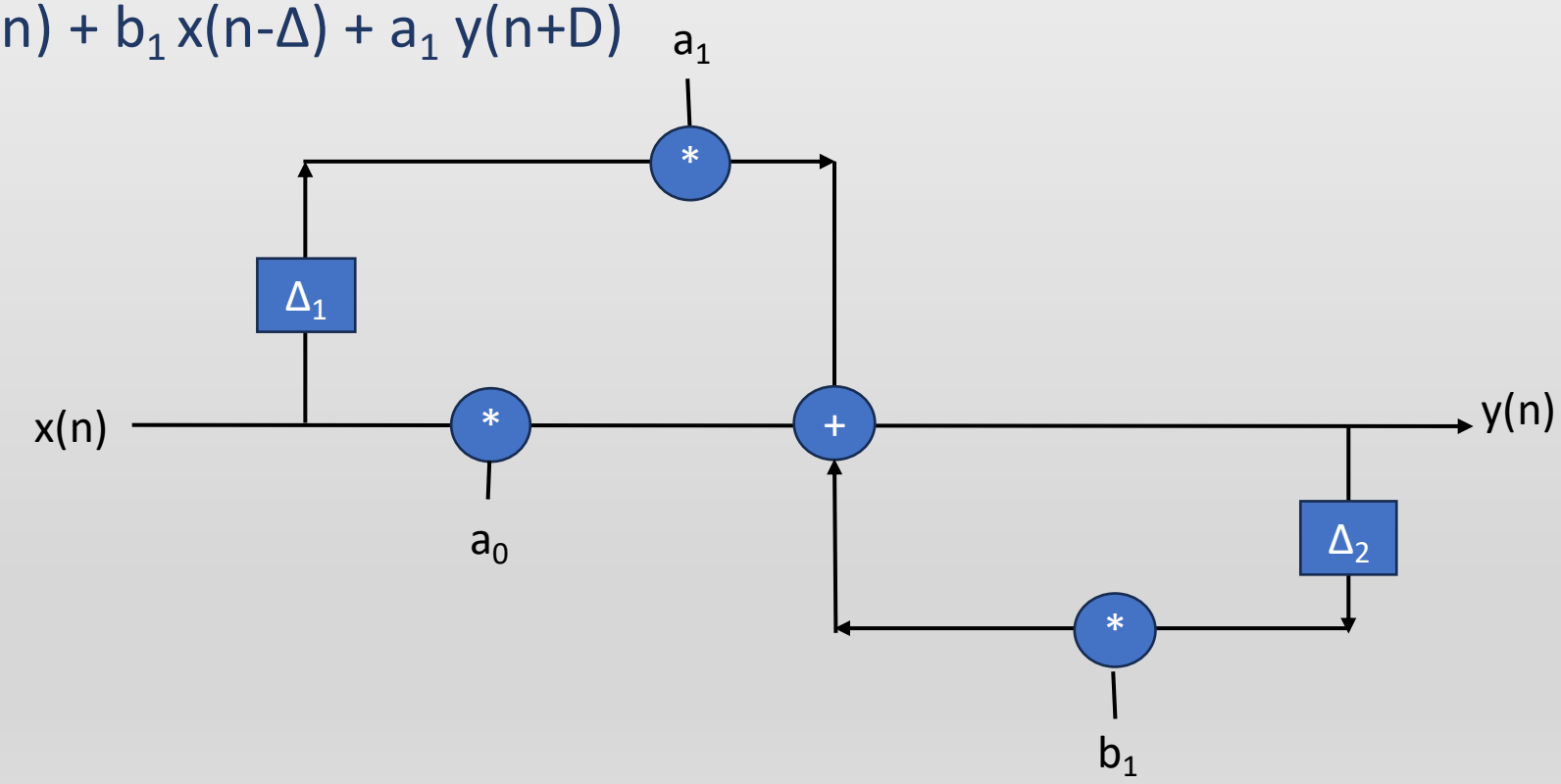
- Delay varies as the output of an LFO
- Difference Equation
  - Δ is the output of an LFO
  - $y(n) = a_0 x(n) + a_1 x(n-\Delta)$
- Flowchart



- You need:
  1. Source node,
  2. DelayNode
  3. LFO
  4. GainNode for LFO
  5. GainNode for dry coefficient
  6. Gain Node for wet coefficient
  7. Destination

Infinite Impulse Response

- Difference Equation
  - $y(n) = b_0\, x(n) + b_1\, x(n-\Delta) + a_1\, y(n+D)$
- Flowchart



Digital Filters

- Difference Equation
  - $y(n) = \sum_{i=0}^{M} a_i\, x(n-i) - \sum_{i=1}^{N} b_i\, y(n-i)$
- Block Diagram:
- Filter Order:
  - The maximum number betweer M and N