



Tanata University

BAND PASS FILTER

using RLC as Band Pass Filter

PRESENTED TO
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PRESENTED BY
full Team

3 / 5 / 2023



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Bandpass Filters

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High Pass Filters

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Combining High& Low

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Applications of Bandpass
Filters

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voice Band Pass Filter

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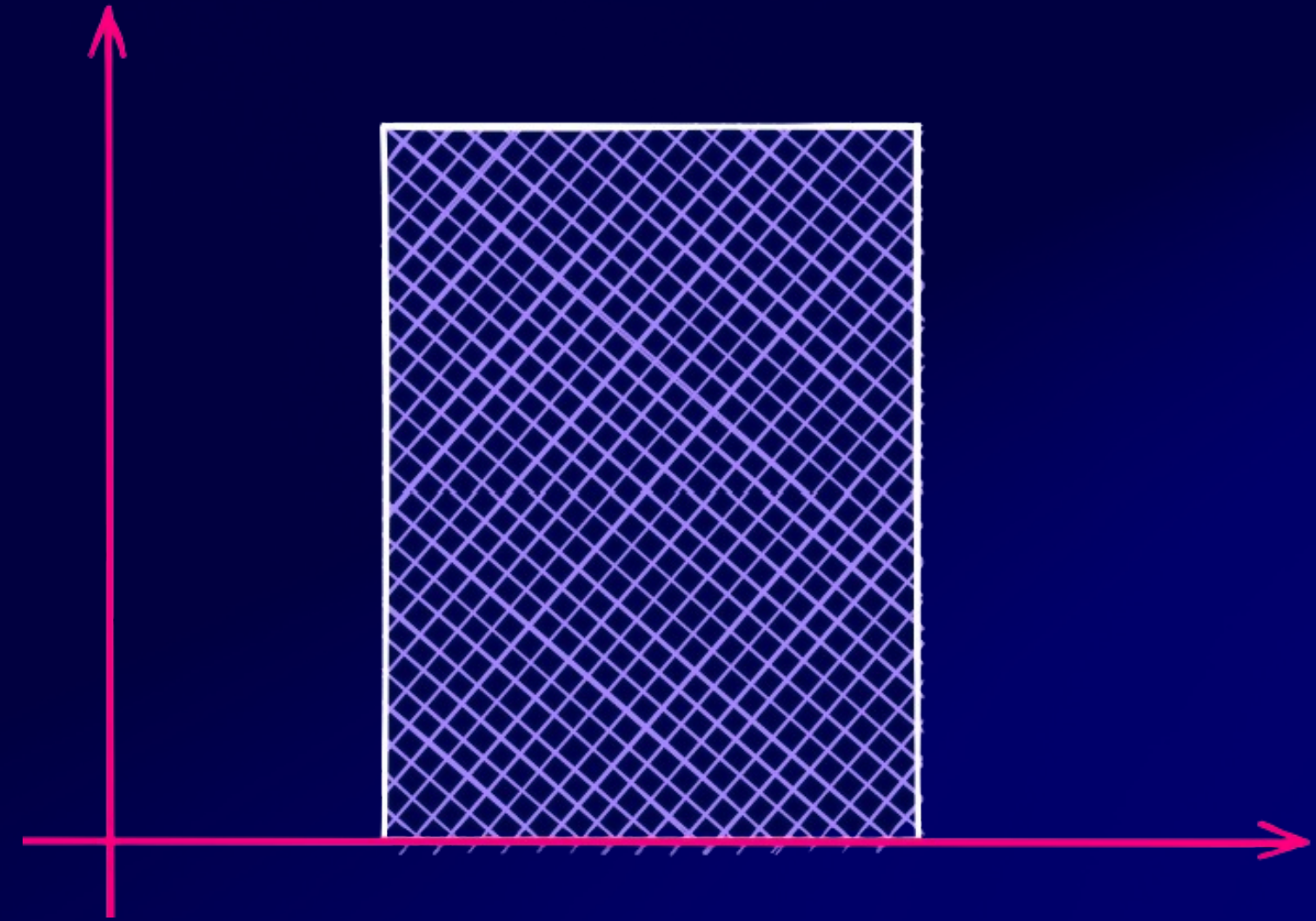
Conclusion

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THE TEAM

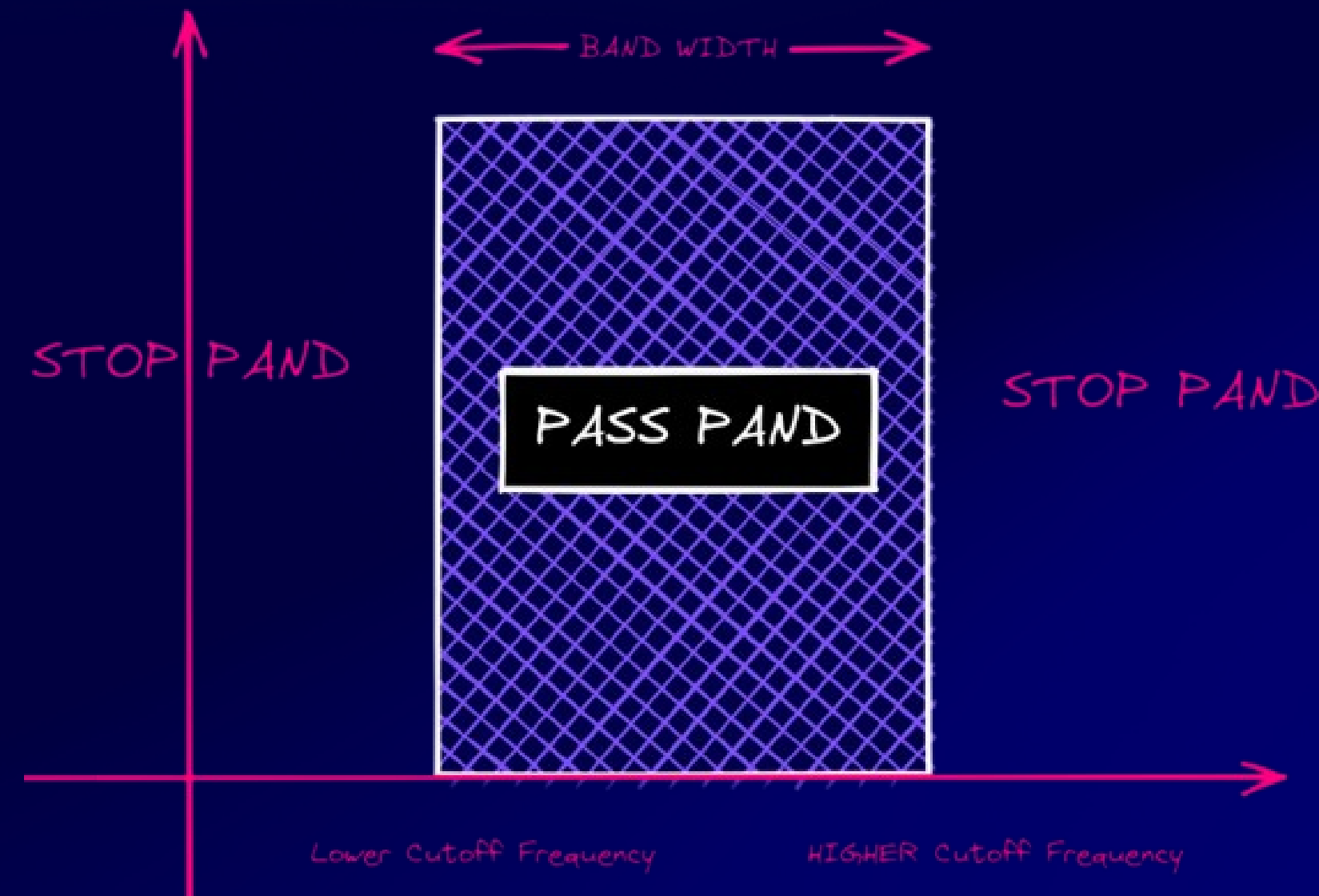
BANDPASS FILTER

- A bandpass filter allows a range of frequencies (the “passband”) to pass through and blocks frequencies outside that range
- The width of frequencies passed is the “bandwidth”
- Important characteristics: Cut-off freq, passband, stopband, bandwidth, ripple, roll-off rate



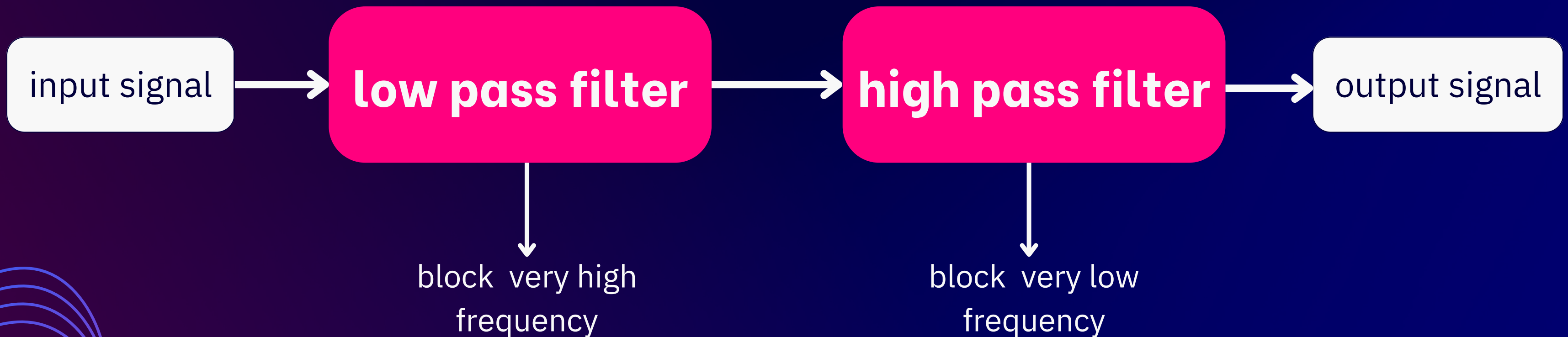
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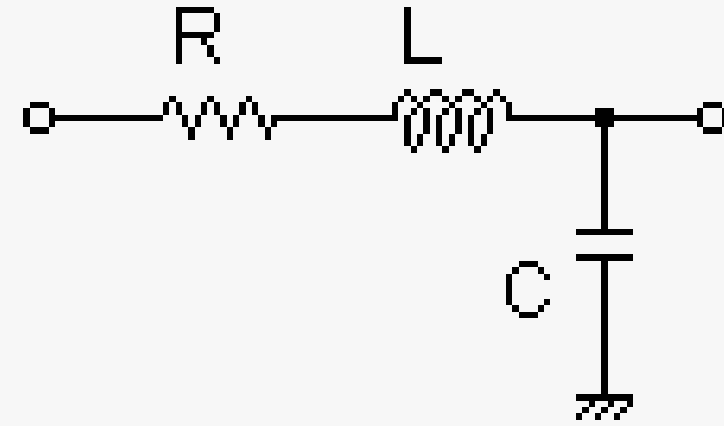


Design

By Connecting or cascading together a singel High pass filter circuit to low pass filter filter circuit we obtain bnad pass filter

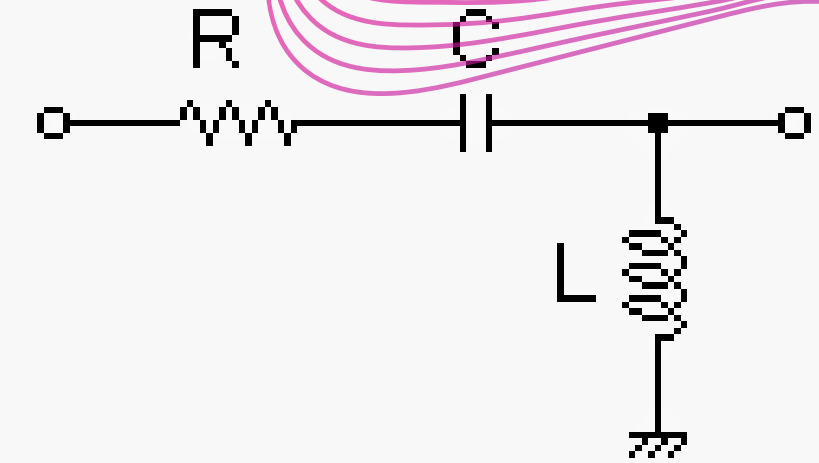


Low Pass Filter



- An RLC Low Pass Filter allows low-frequency signals while attenuating high-frequency signals.
- The capacitor allows high-frequency signals to pass through, and the inductor blocks high-frequency signals.

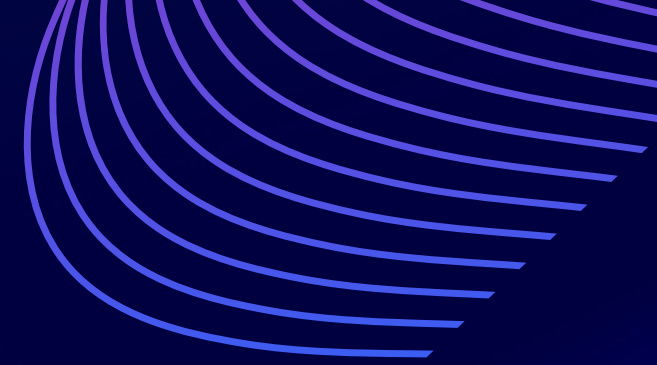
High Pass Filter



- An RLC High Pass Filter allows high-frequency signals while attenuating low-frequency signals.
- The capacitor blocks low-frequency signals, and the inductor blocks high-frequency signals.

BANDPASS FILTER

Body



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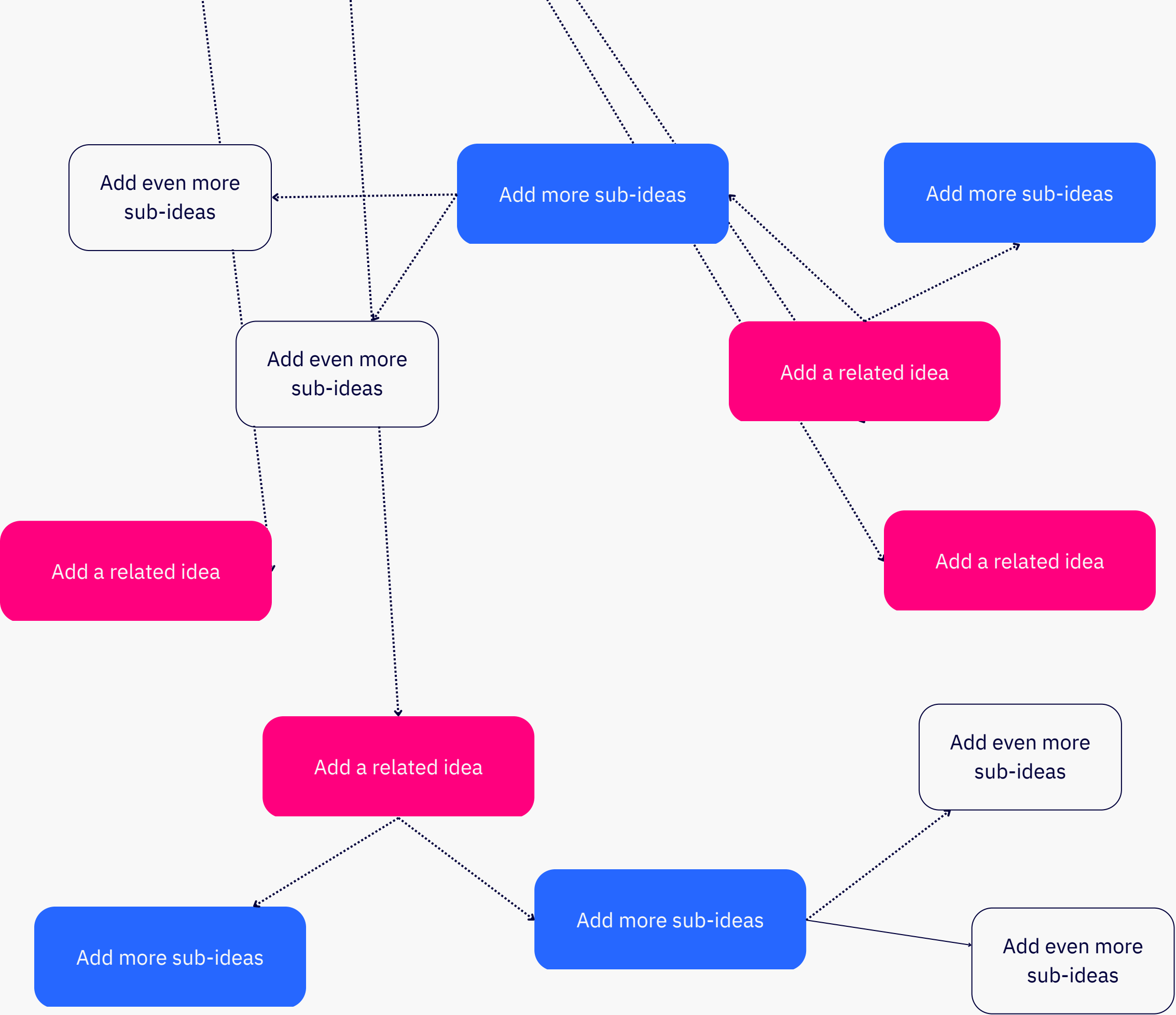
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