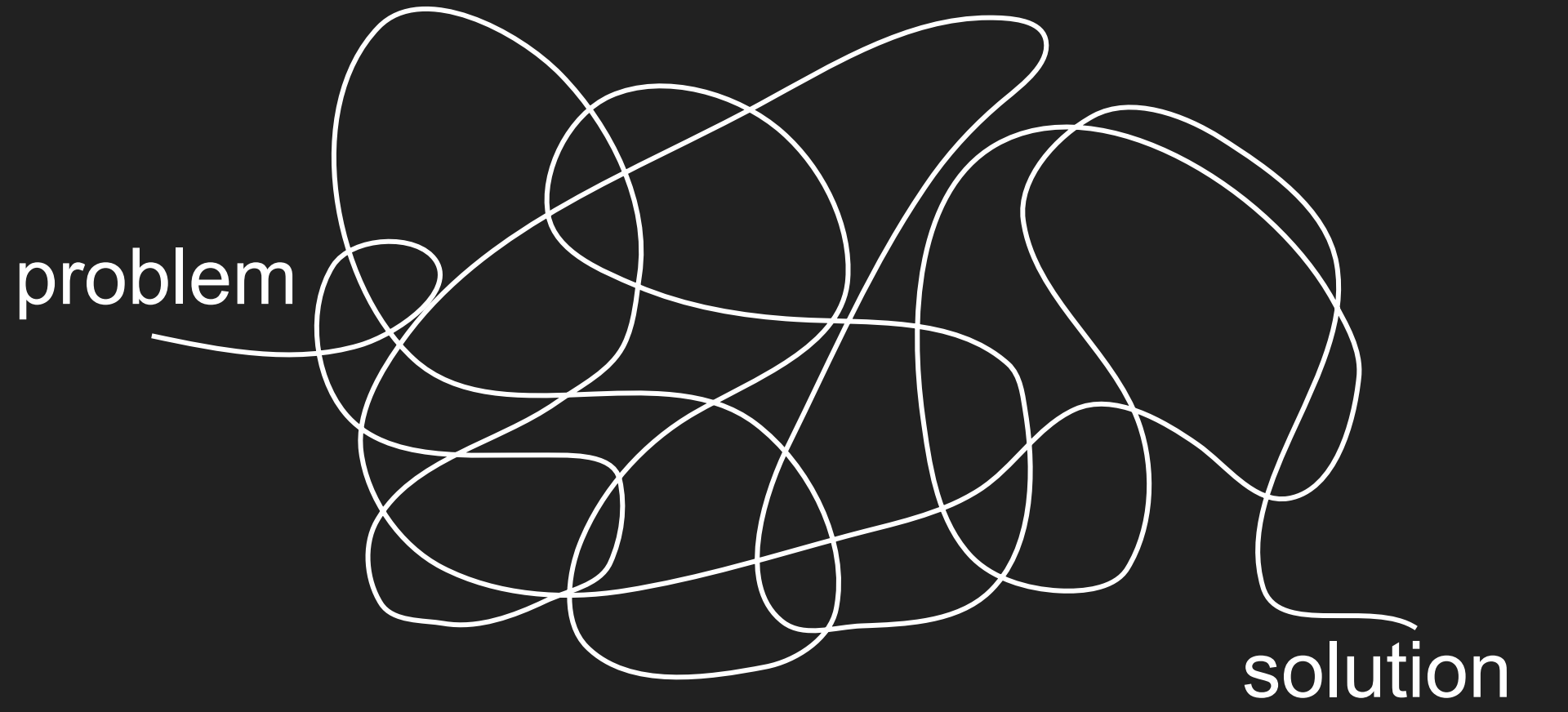

input →
→ output


problem
solution

- Work an example yourself
- Write down exactly what you did
- Generalize from multiple examples
- Test your generalization (algorithm) by hand
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- Find bugs in your code by running test cases
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Population

We have a population of **n** llamas.

Each year, **n/3** new llamas are born, and **n/4** llamas pass away.

How many years will it take to have a population of **x** llamas?

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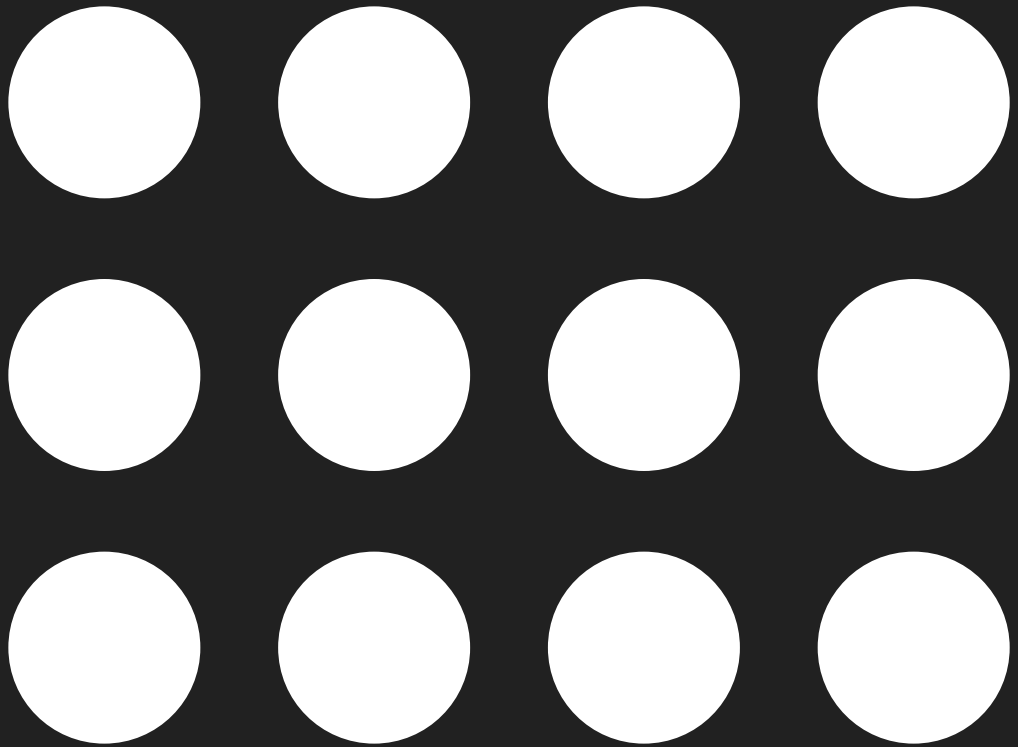
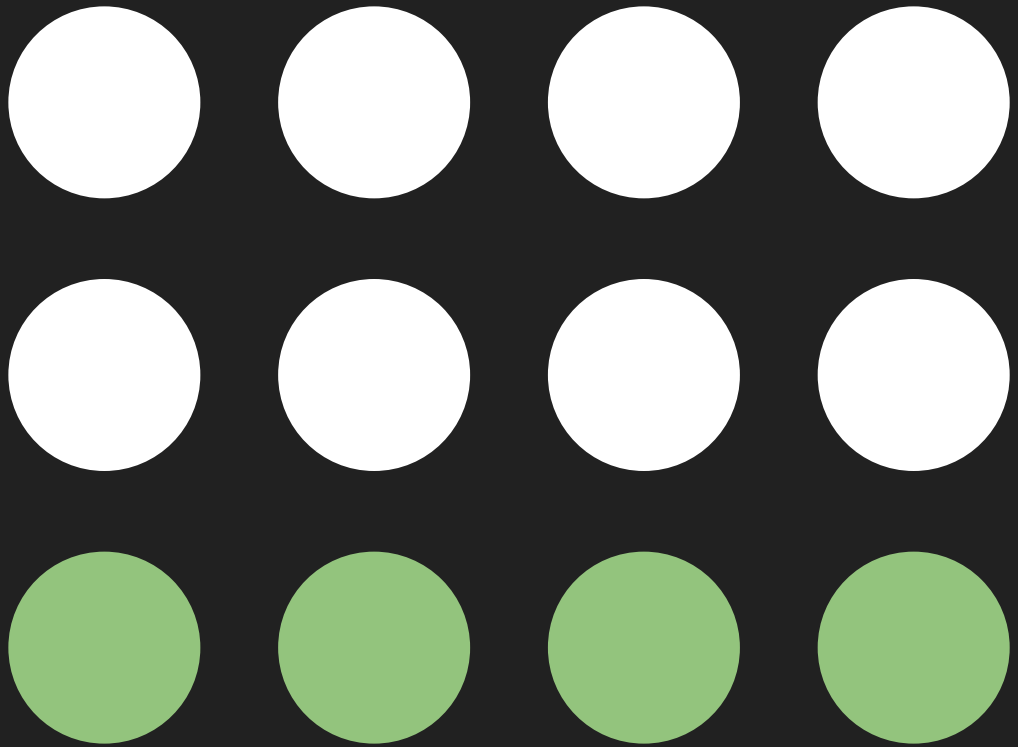
We have a population of **`12`** llamas.

Each year, **`12/3`** new llamas are born, and **`12/4`** llamas pass away.

How many years will it take to have a population of **`13`** llamas?



Year 0



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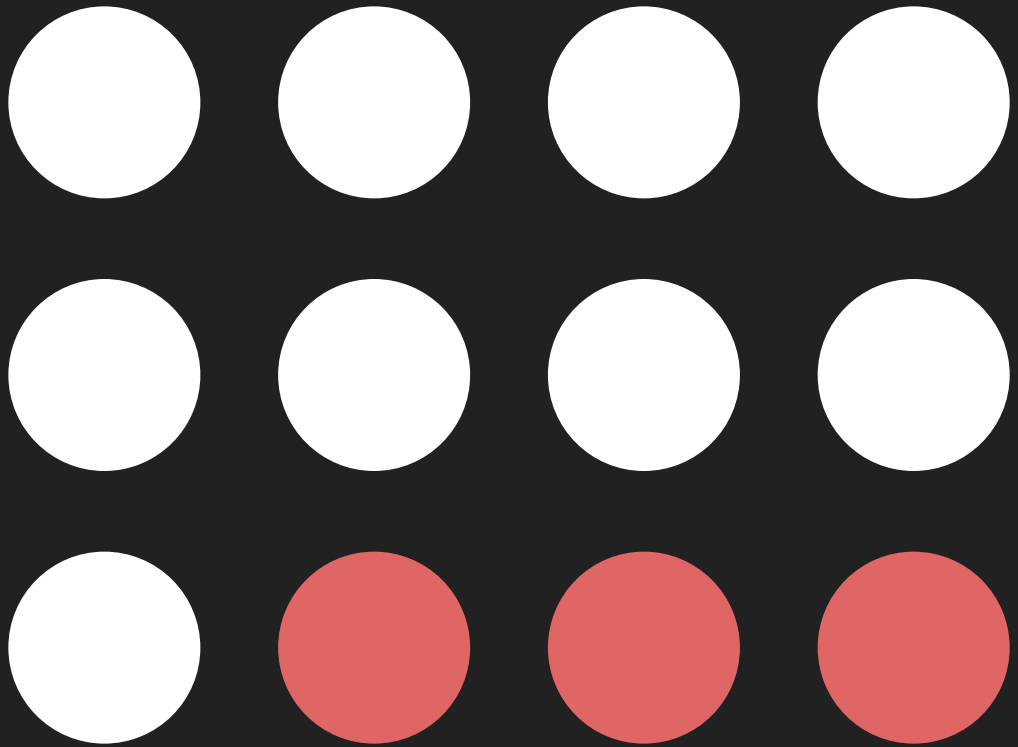

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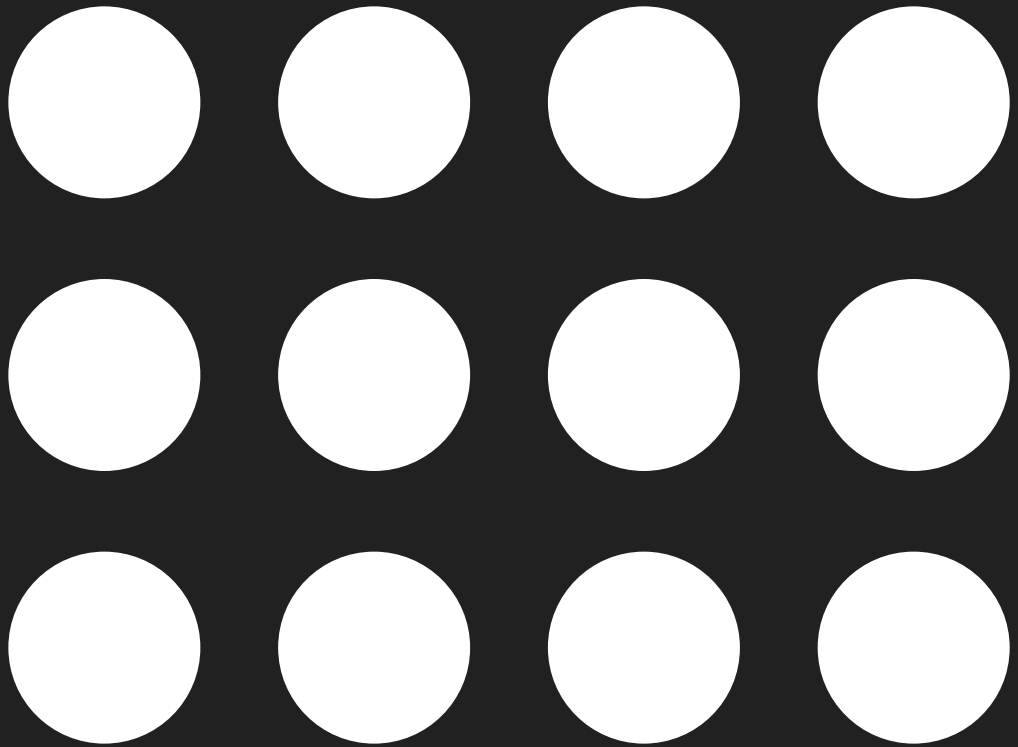

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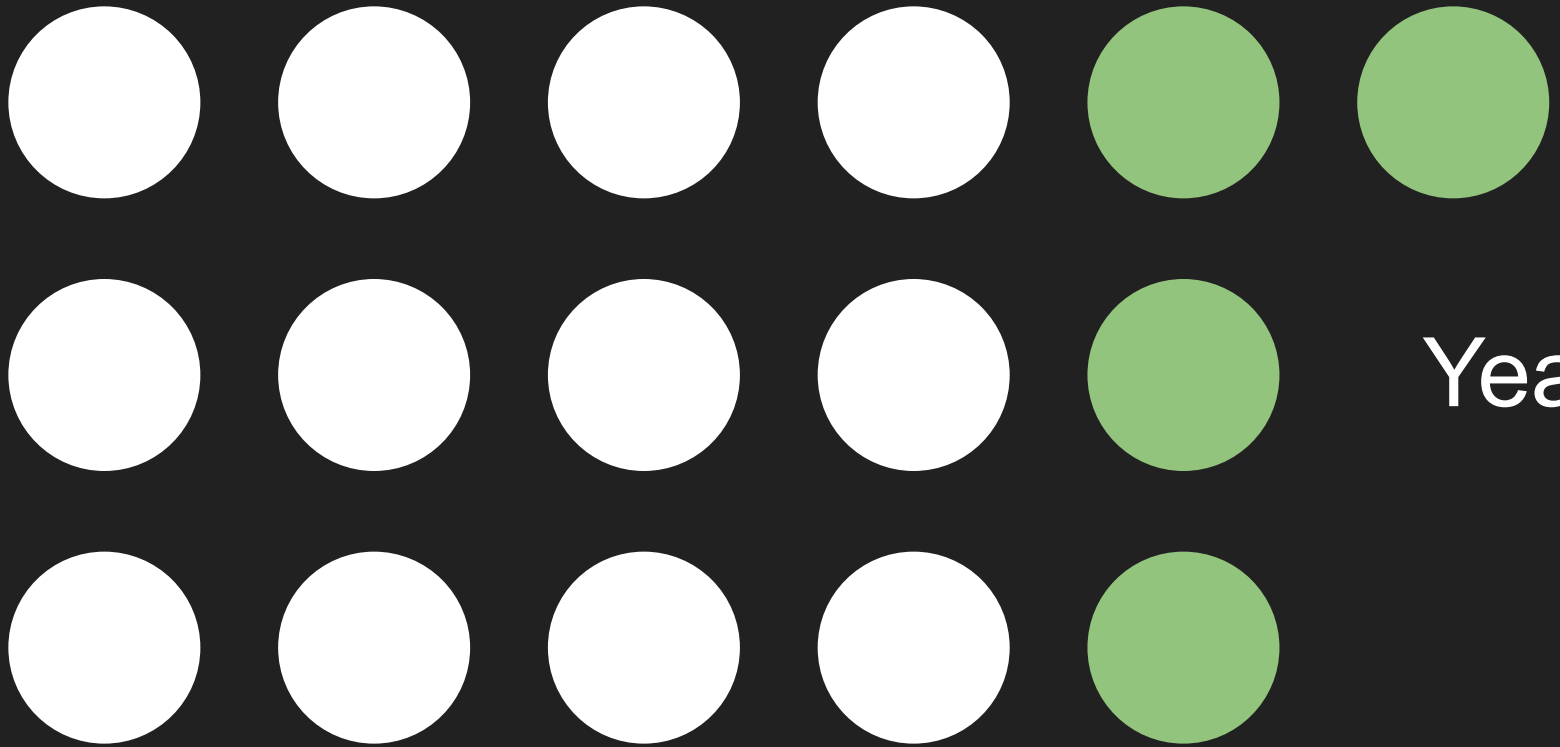
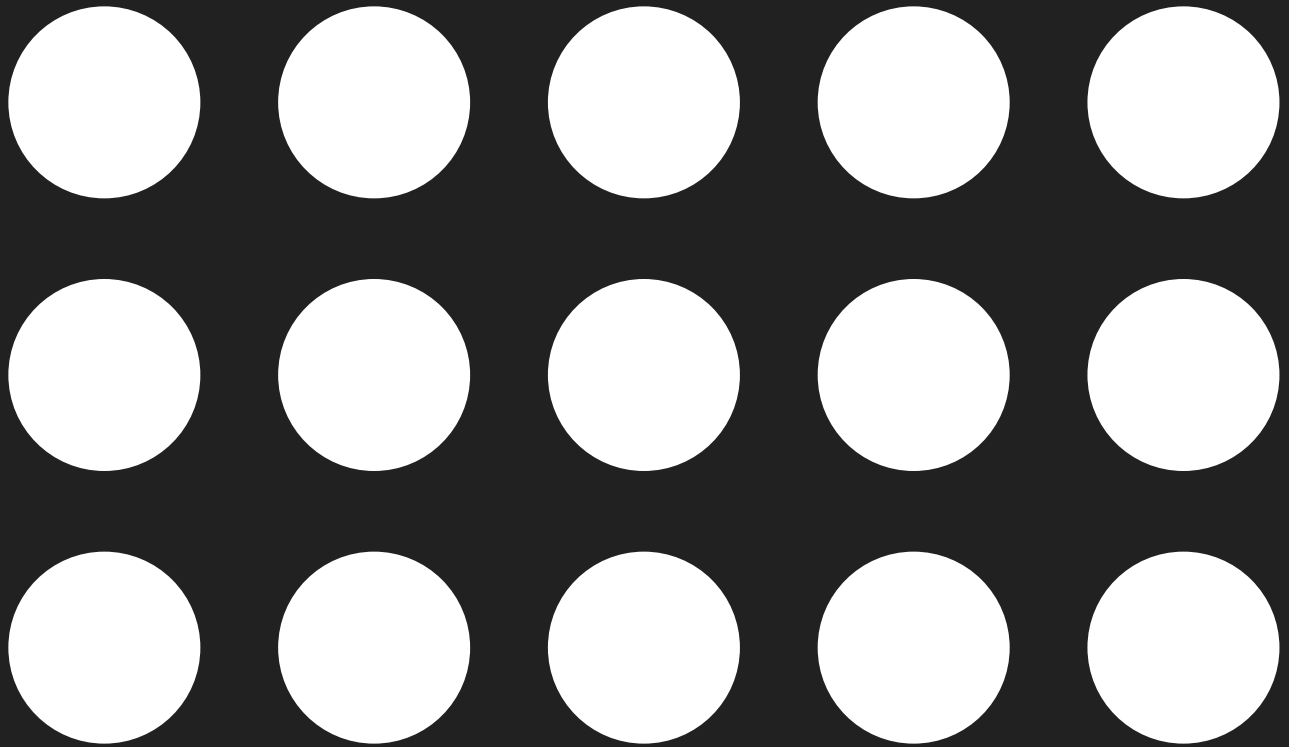

Year 1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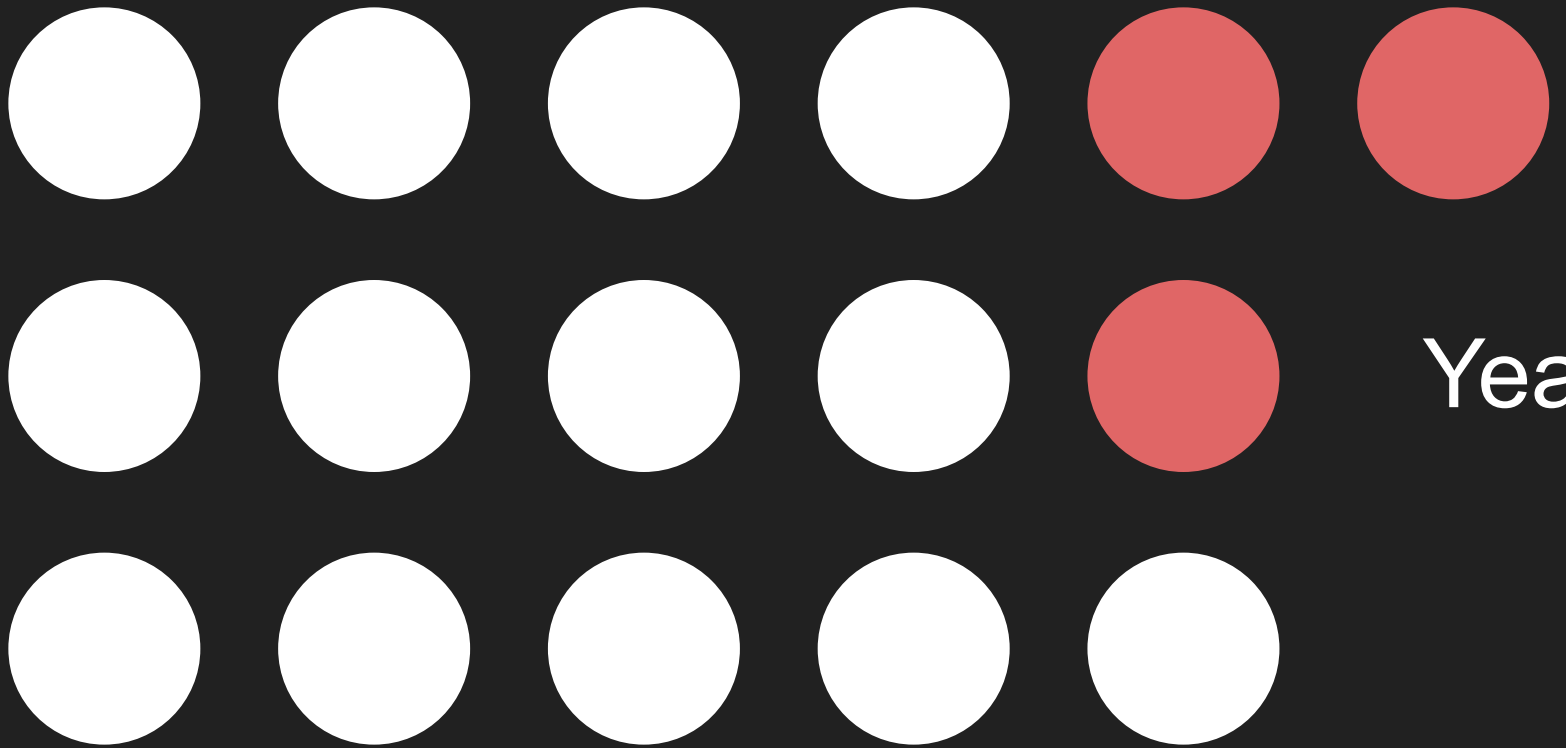
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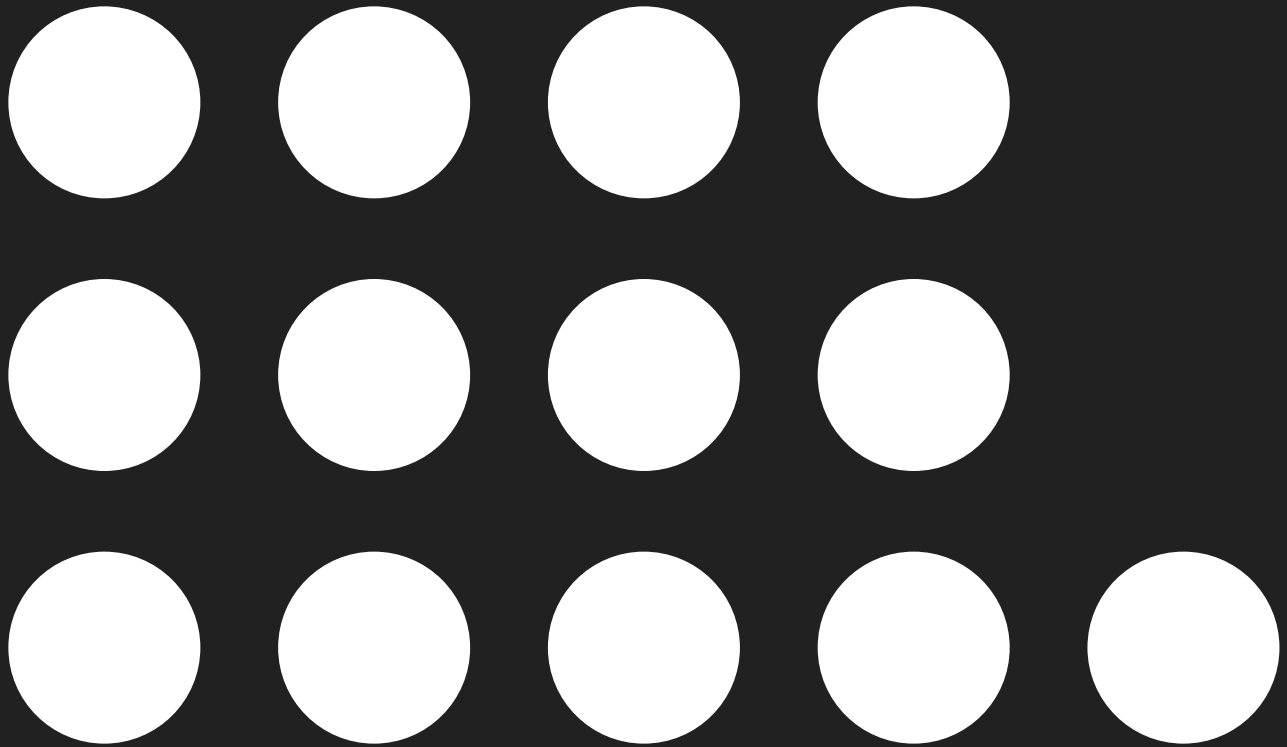

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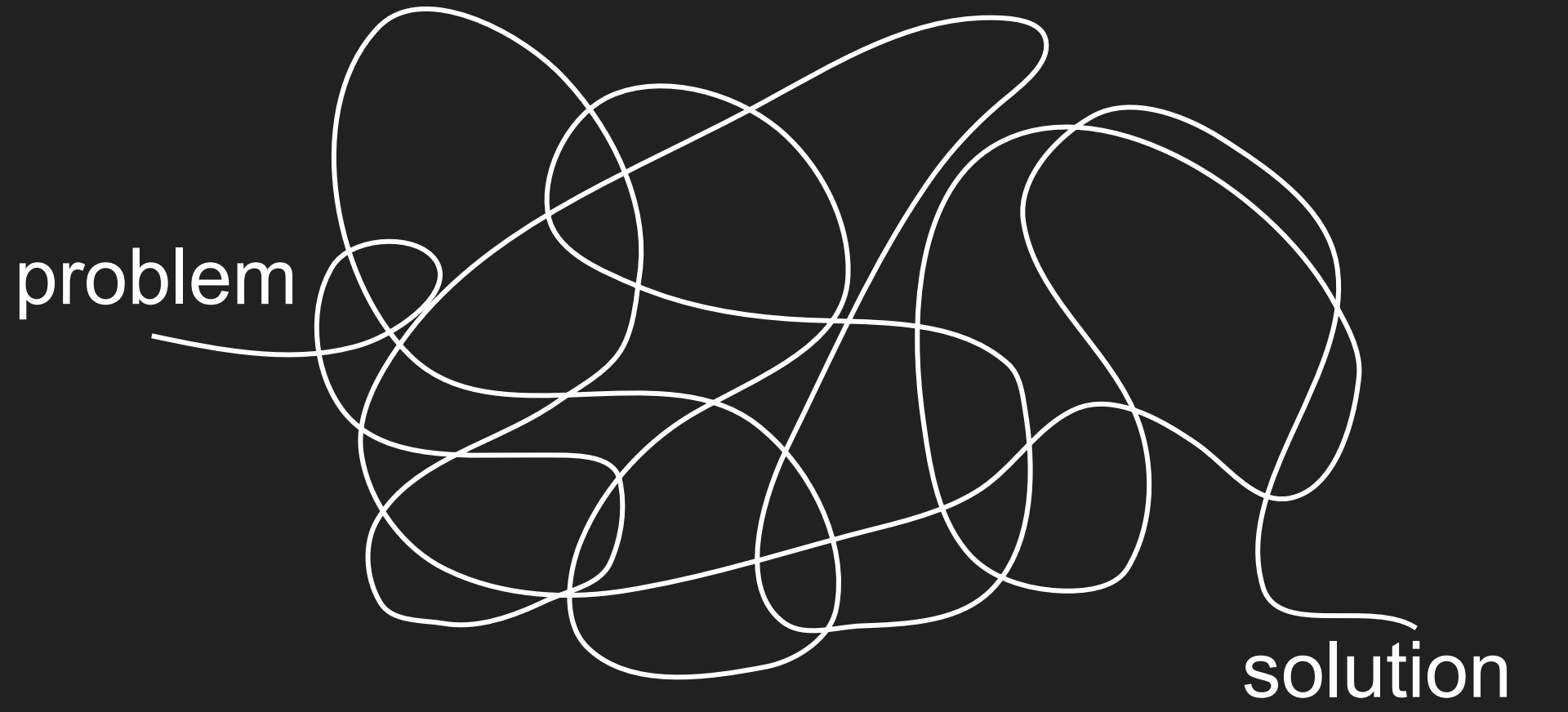
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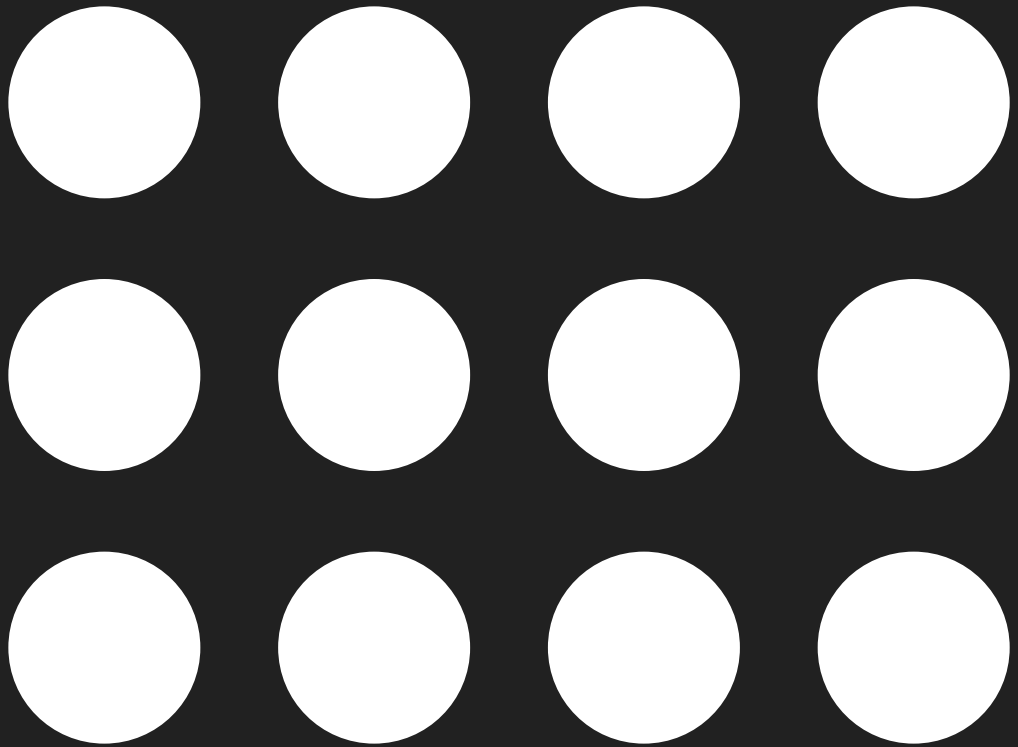

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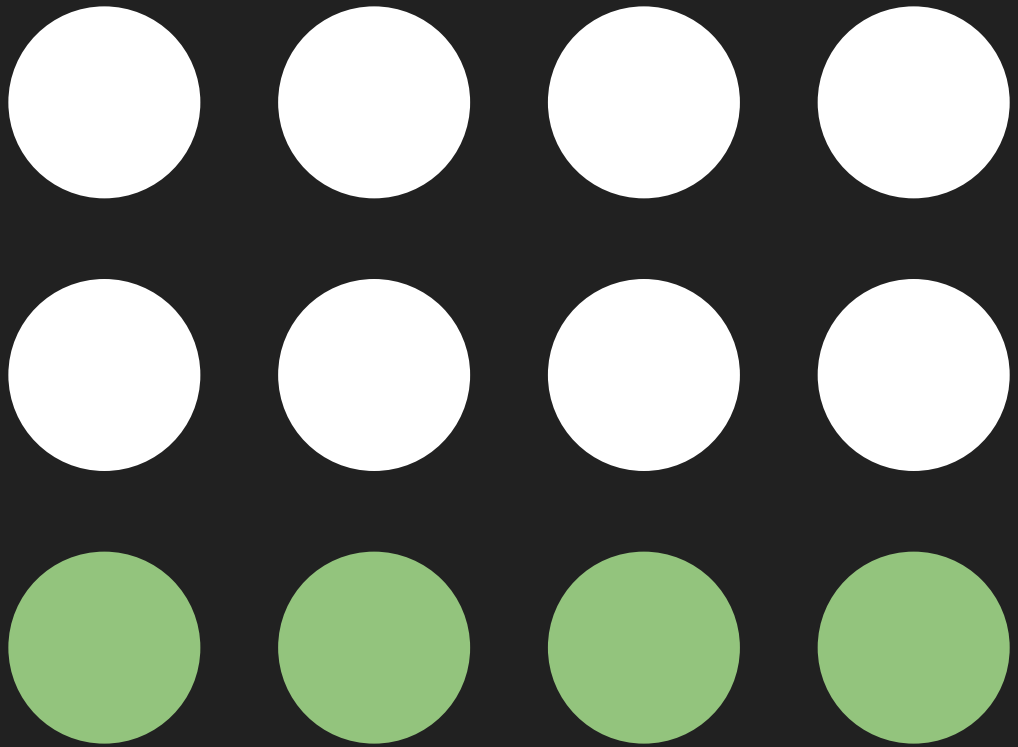

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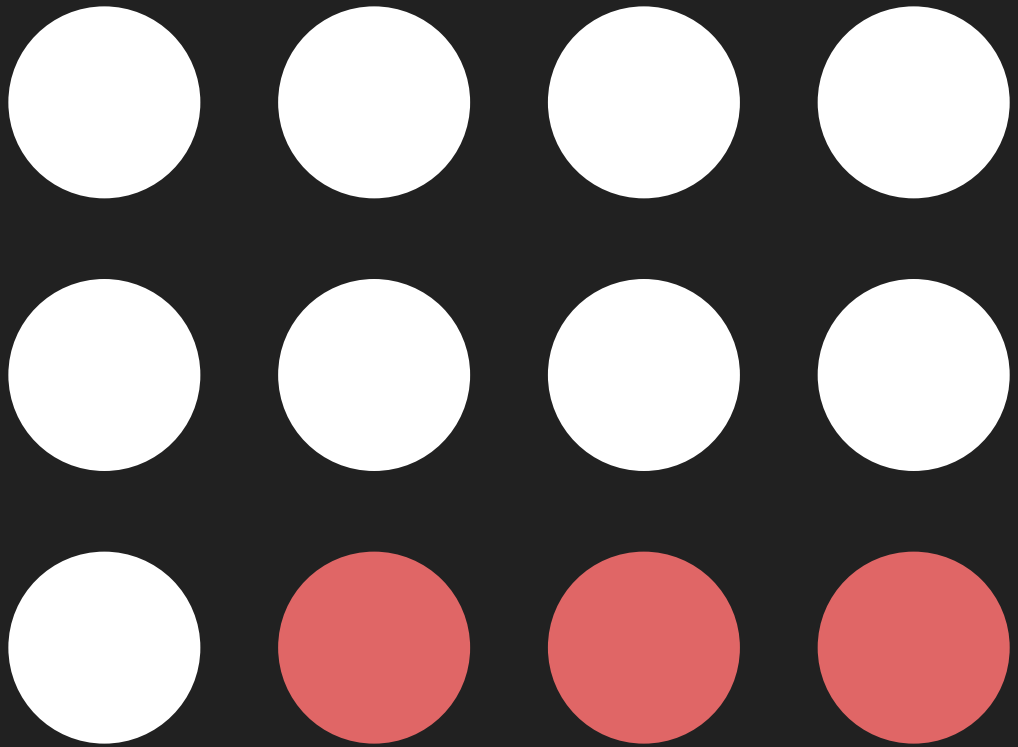

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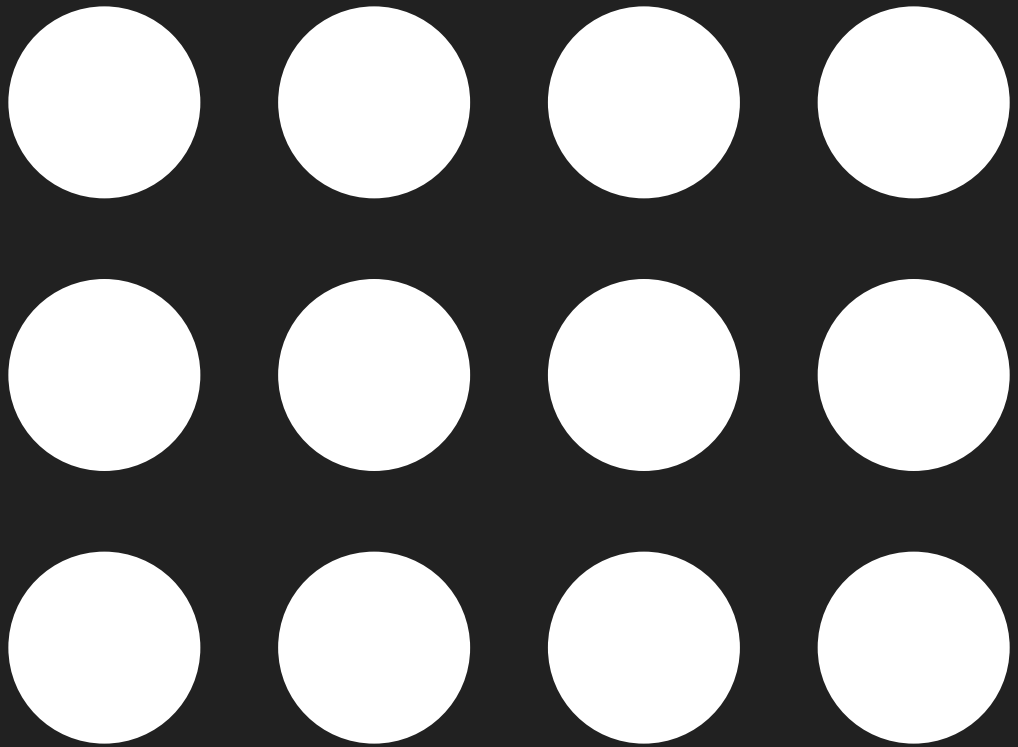

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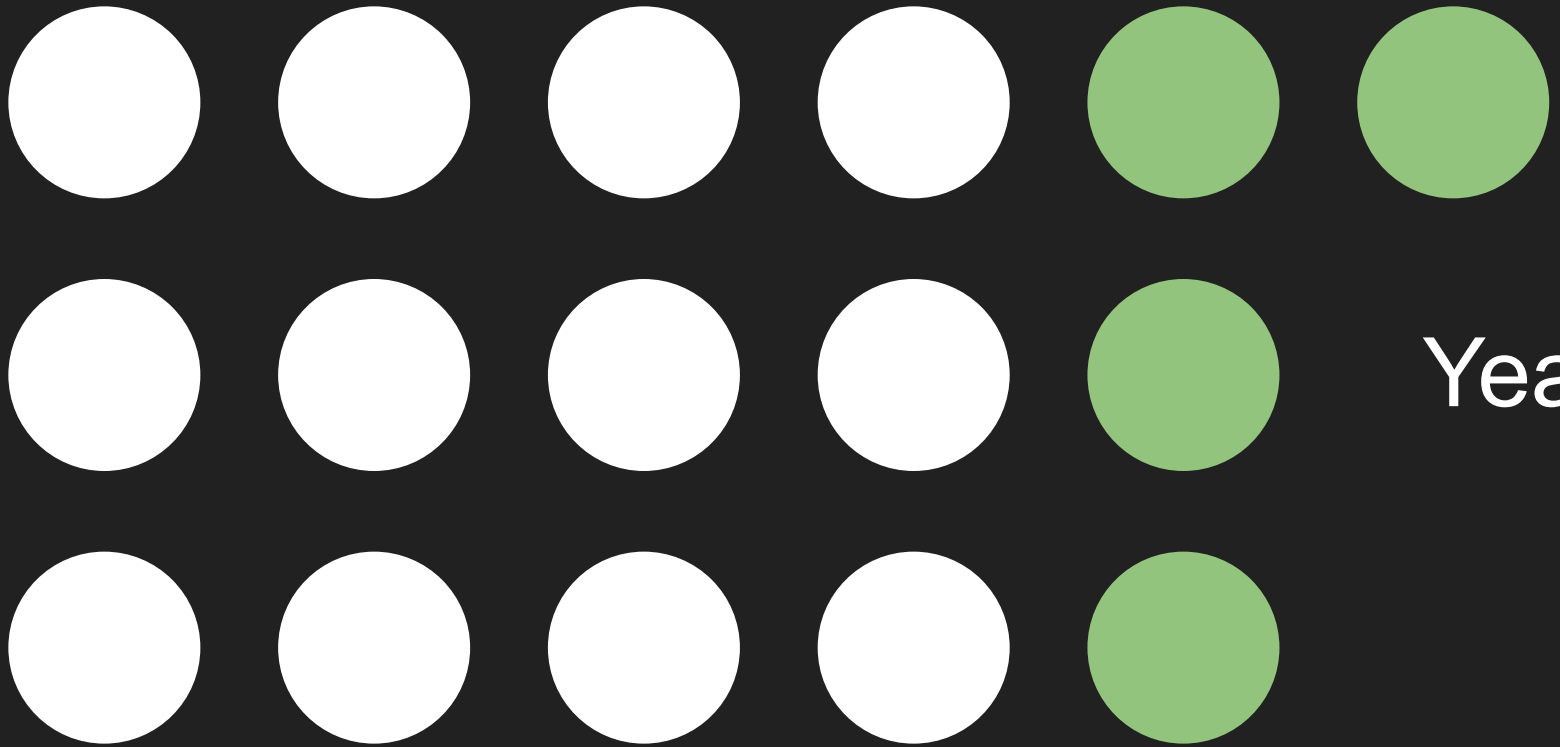
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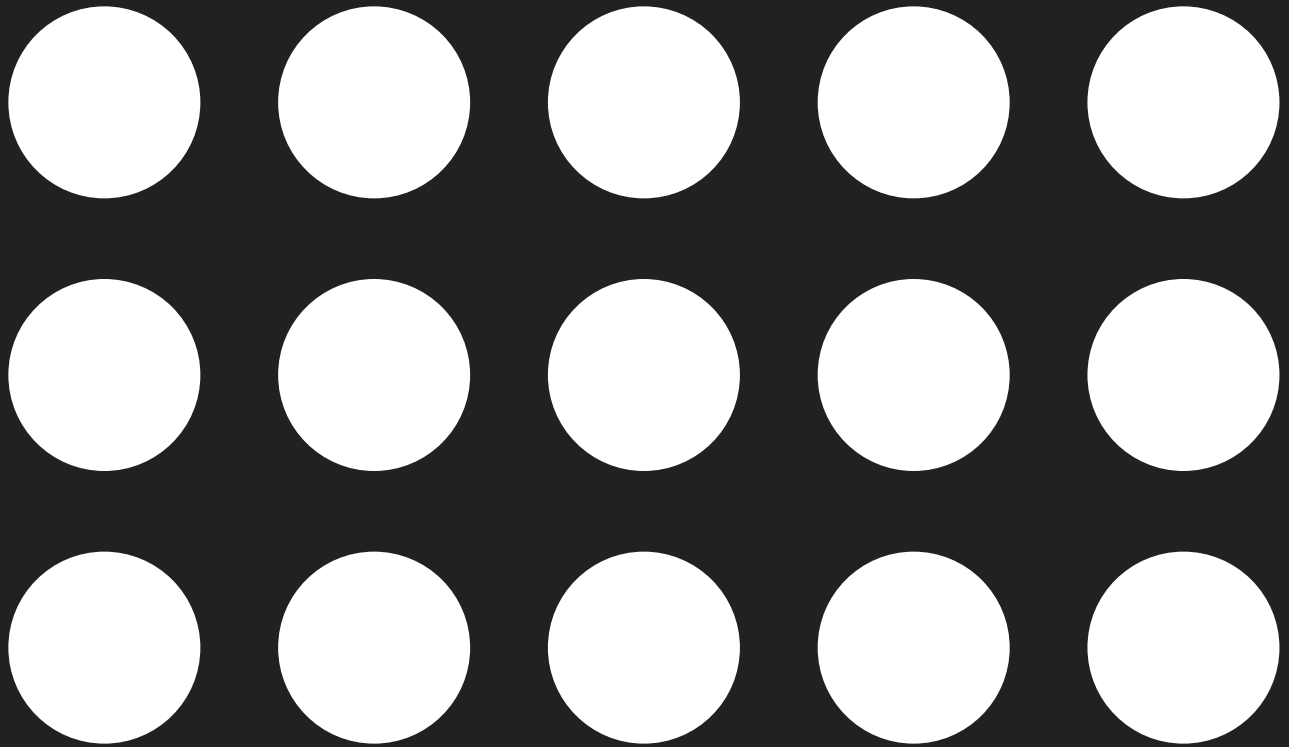
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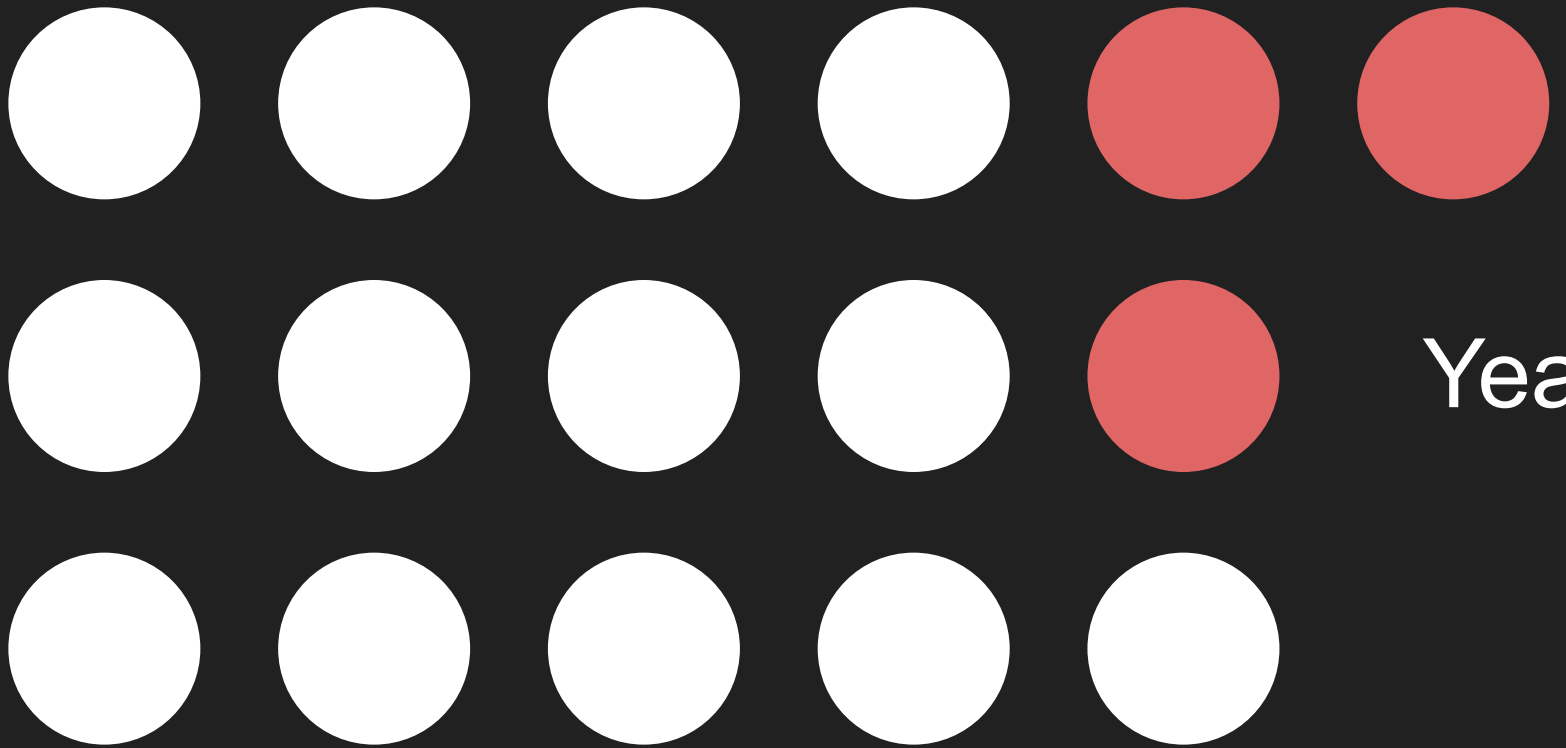
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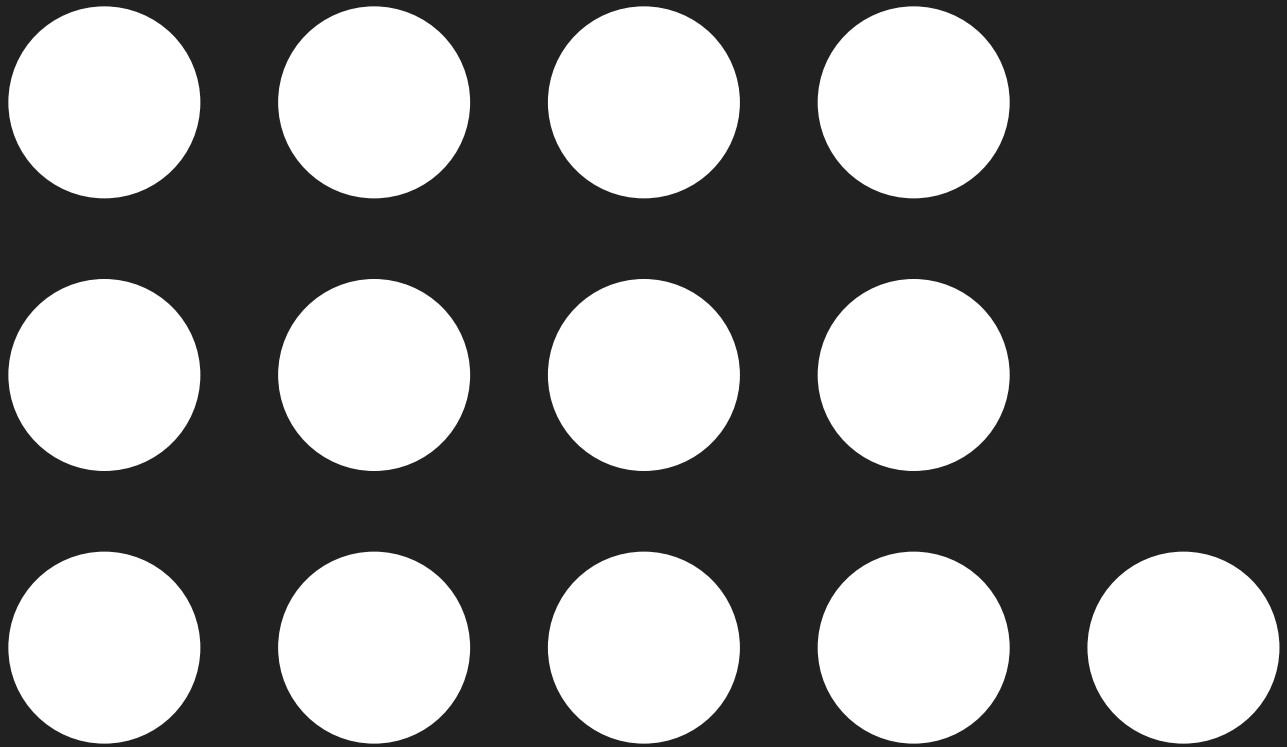

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