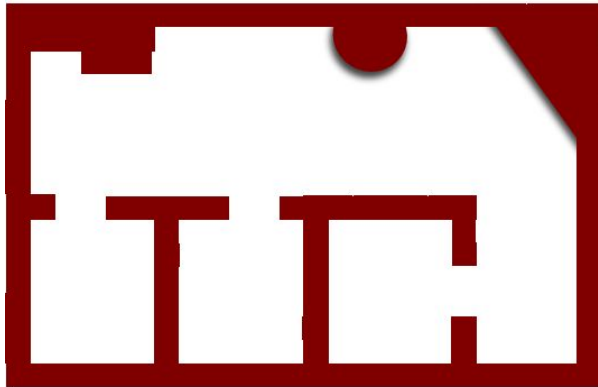


# Frontier Based Algorithm Simulation

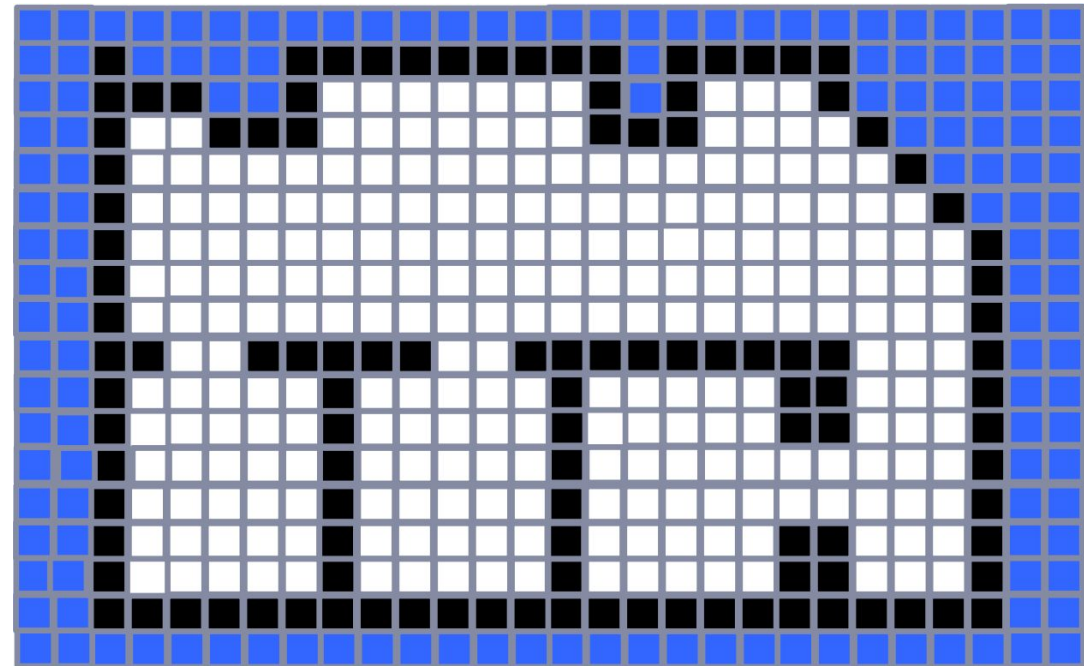
Md. Khalilur Rhaman  
Brac University

# What is an Occupancy Grid?

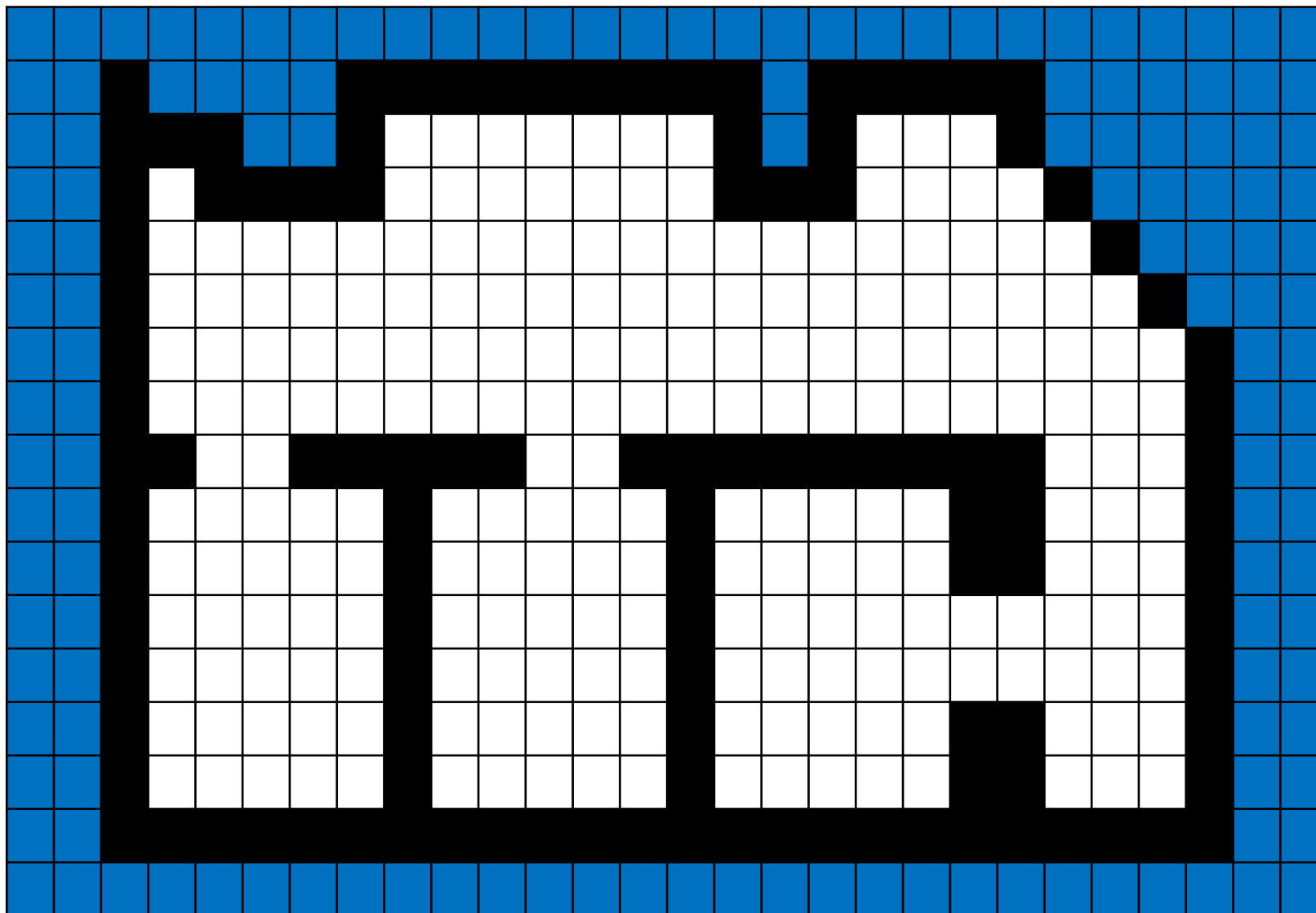
- A way of representing a map as a gridded world where each cell is either “occupied” or “empty” or “unknown”.

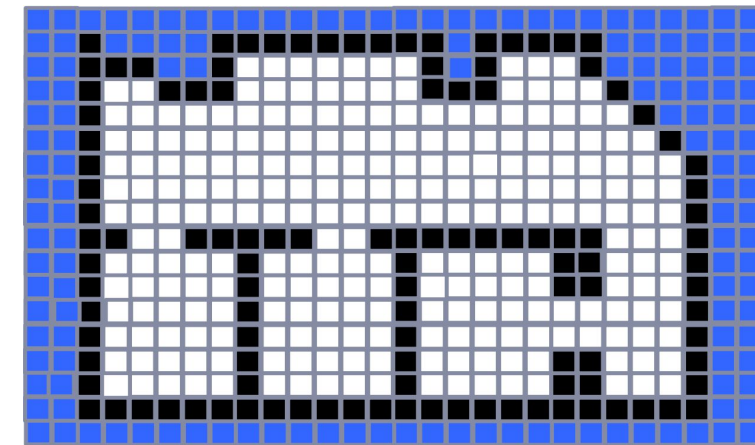
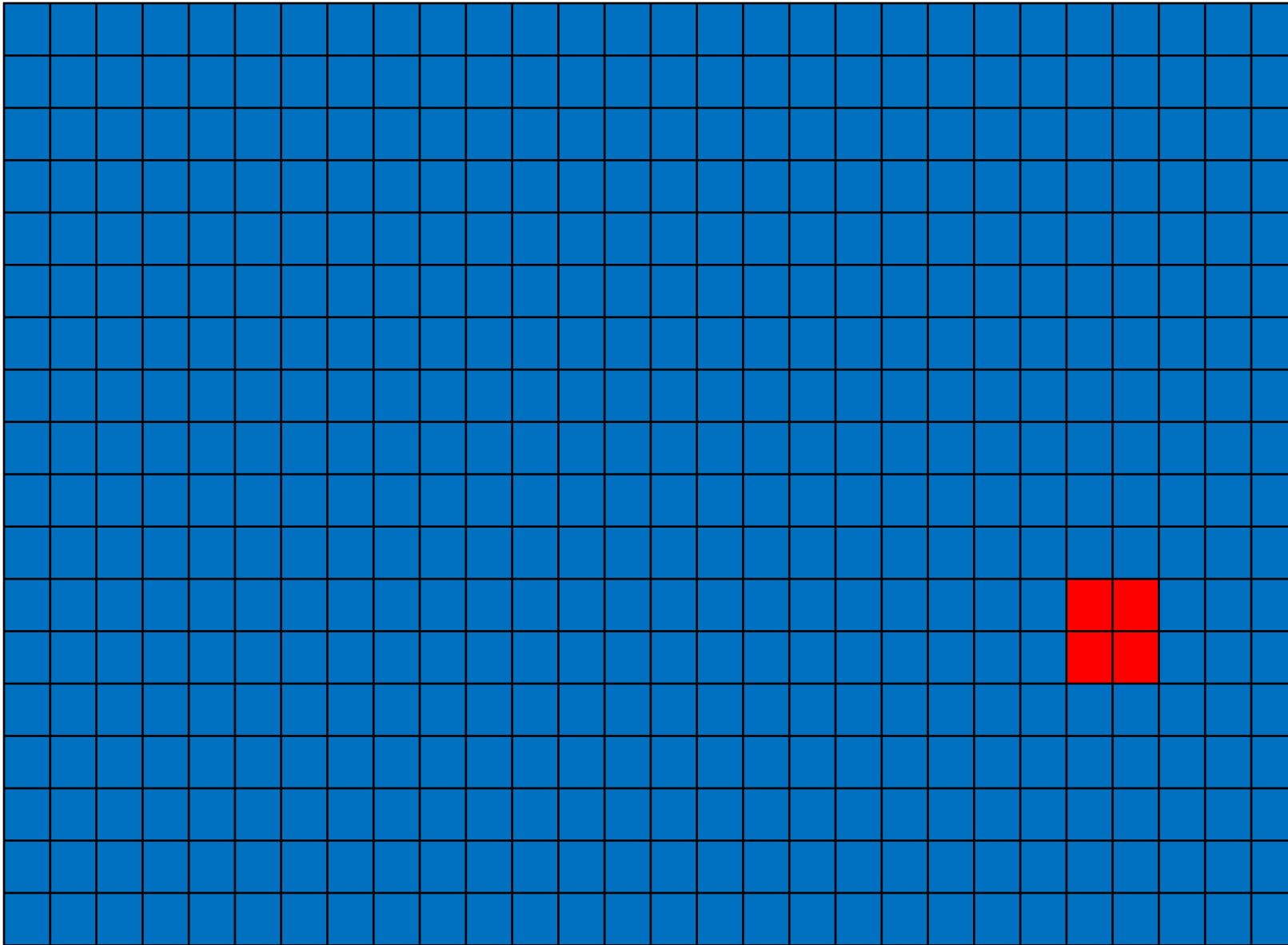


Your World

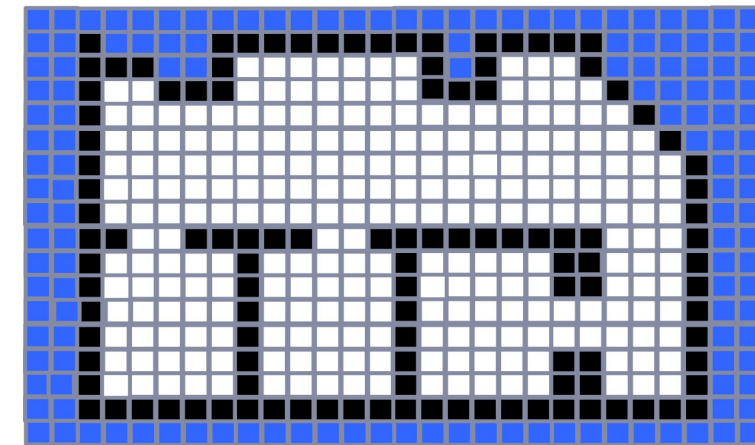
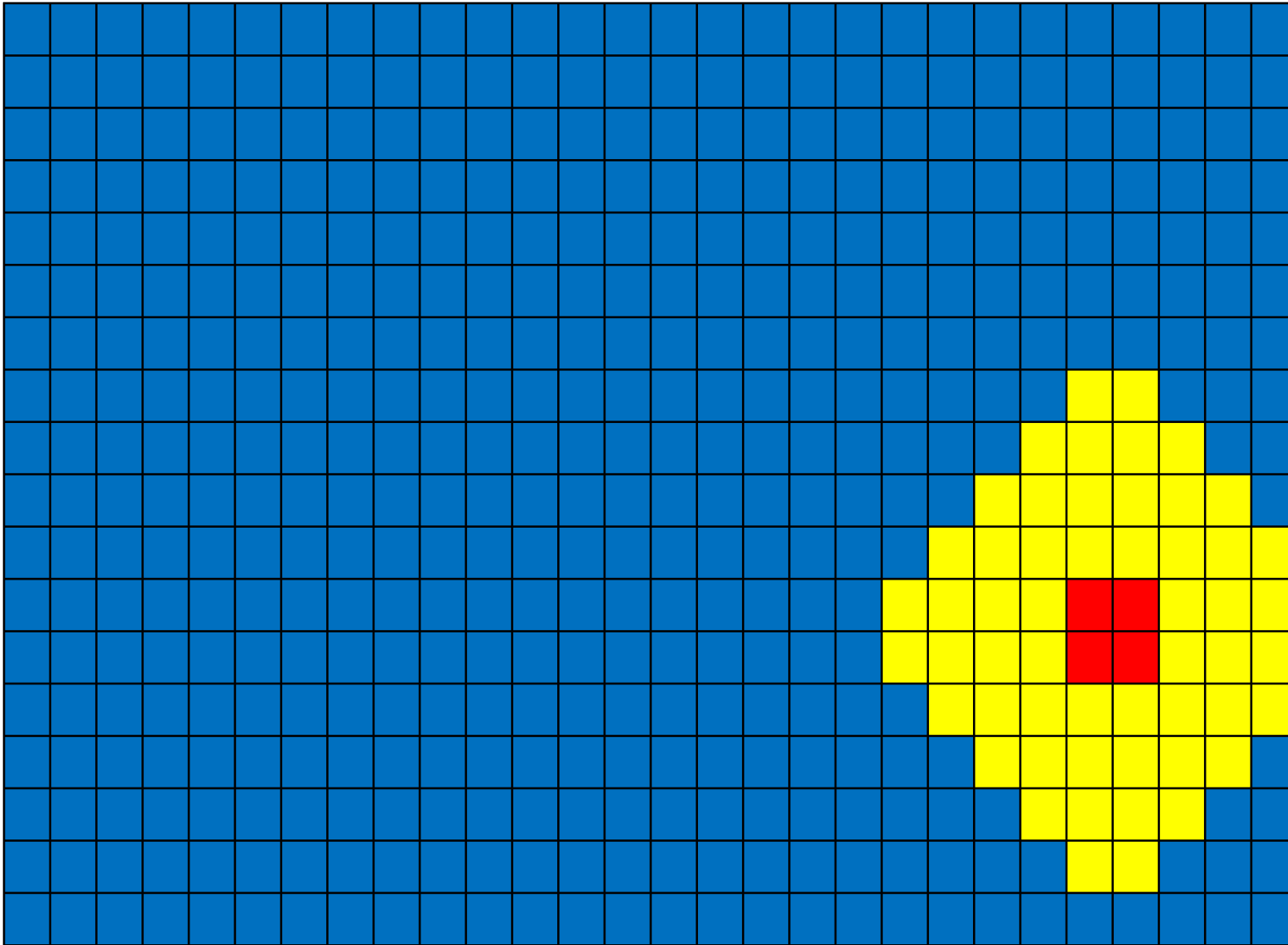


Grid generated by a Robot => boundary shape

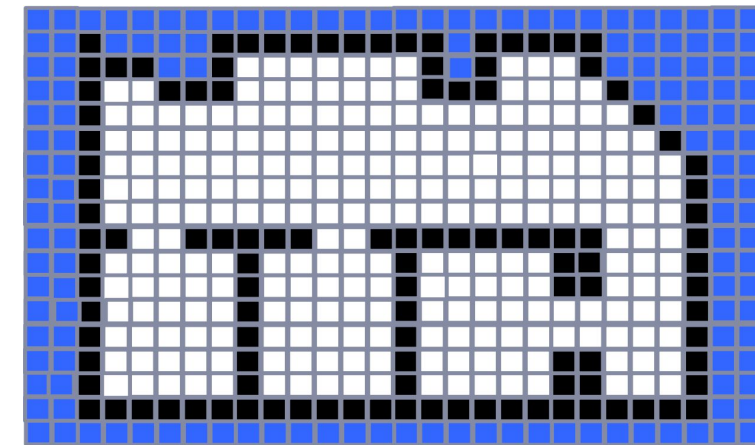
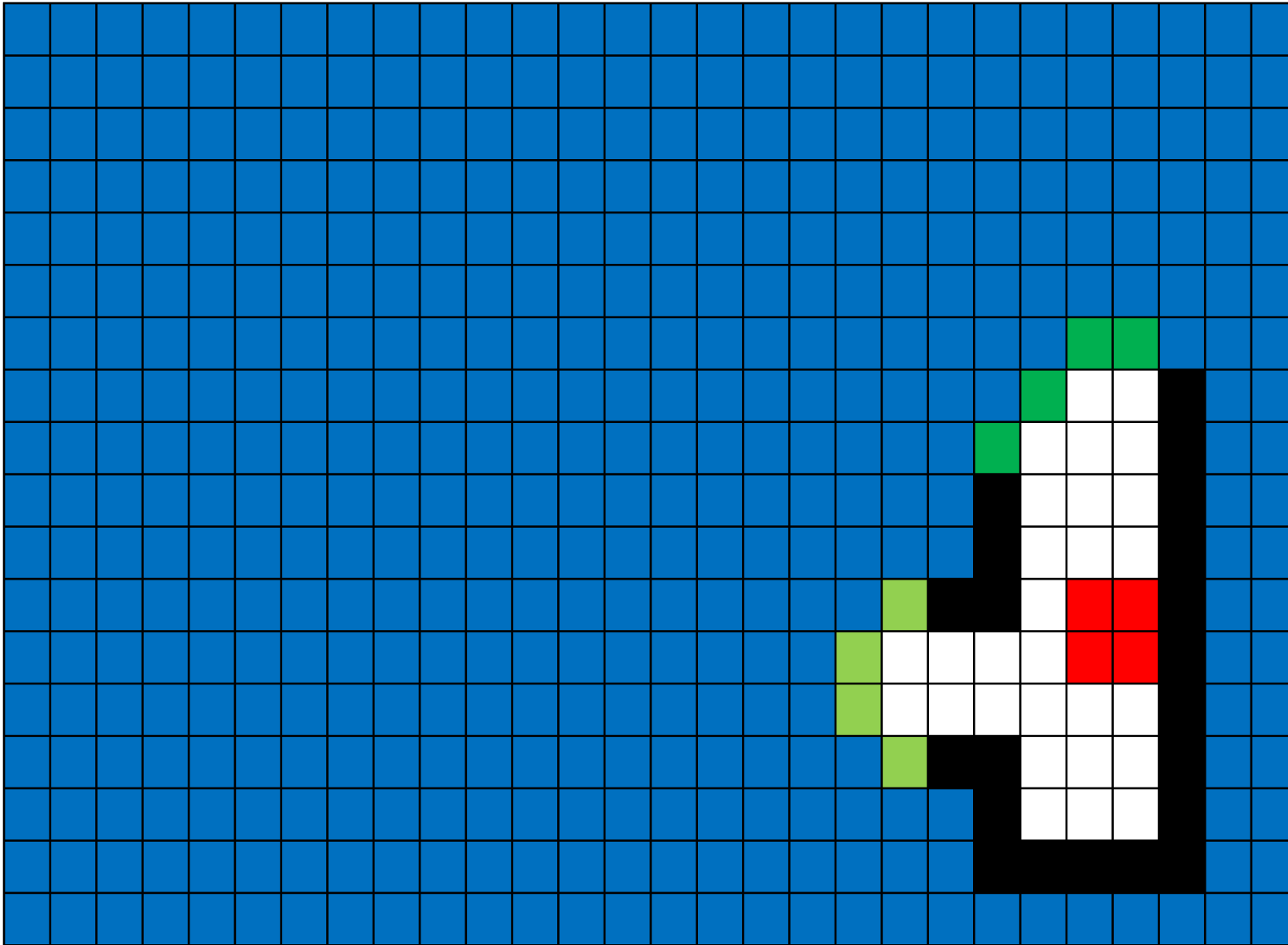




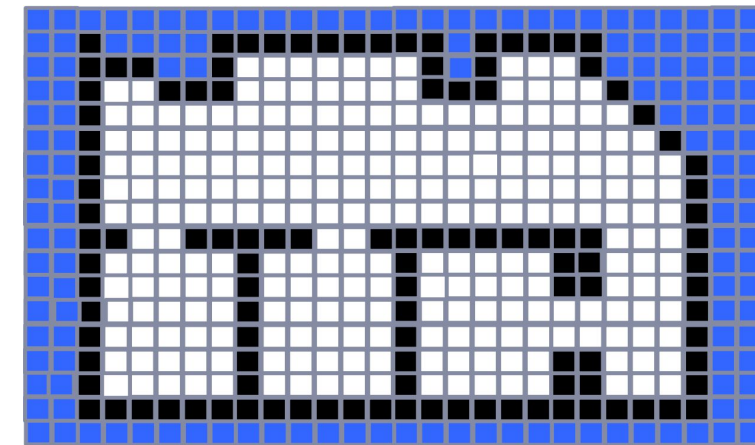
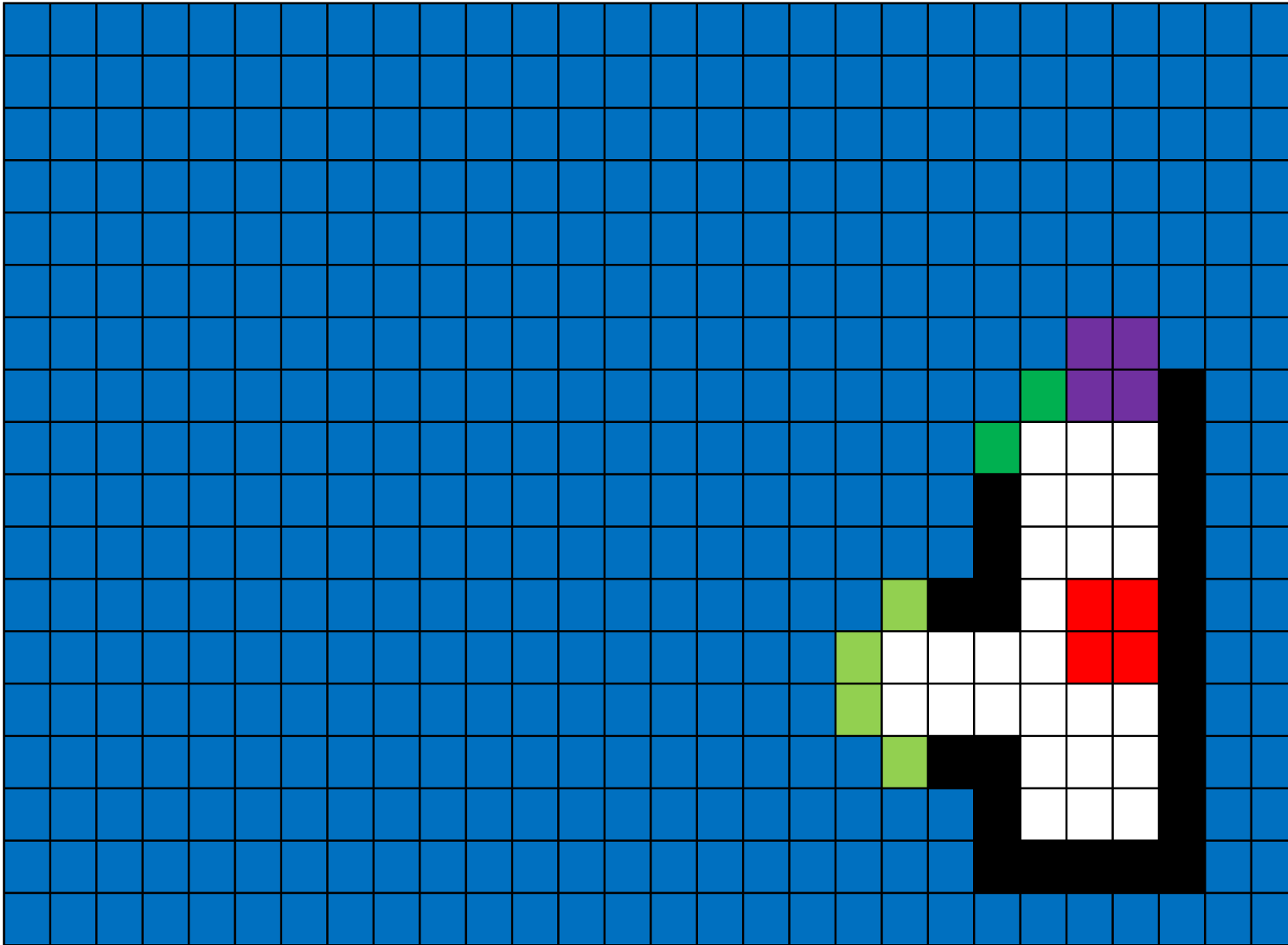
Grid generated by a Robot => boundary shape



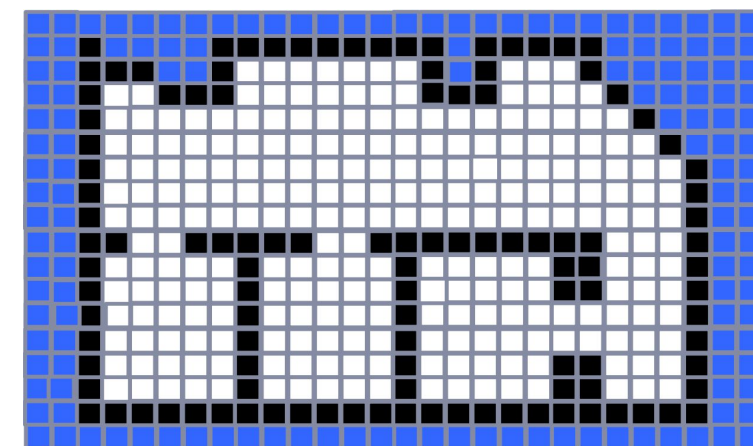
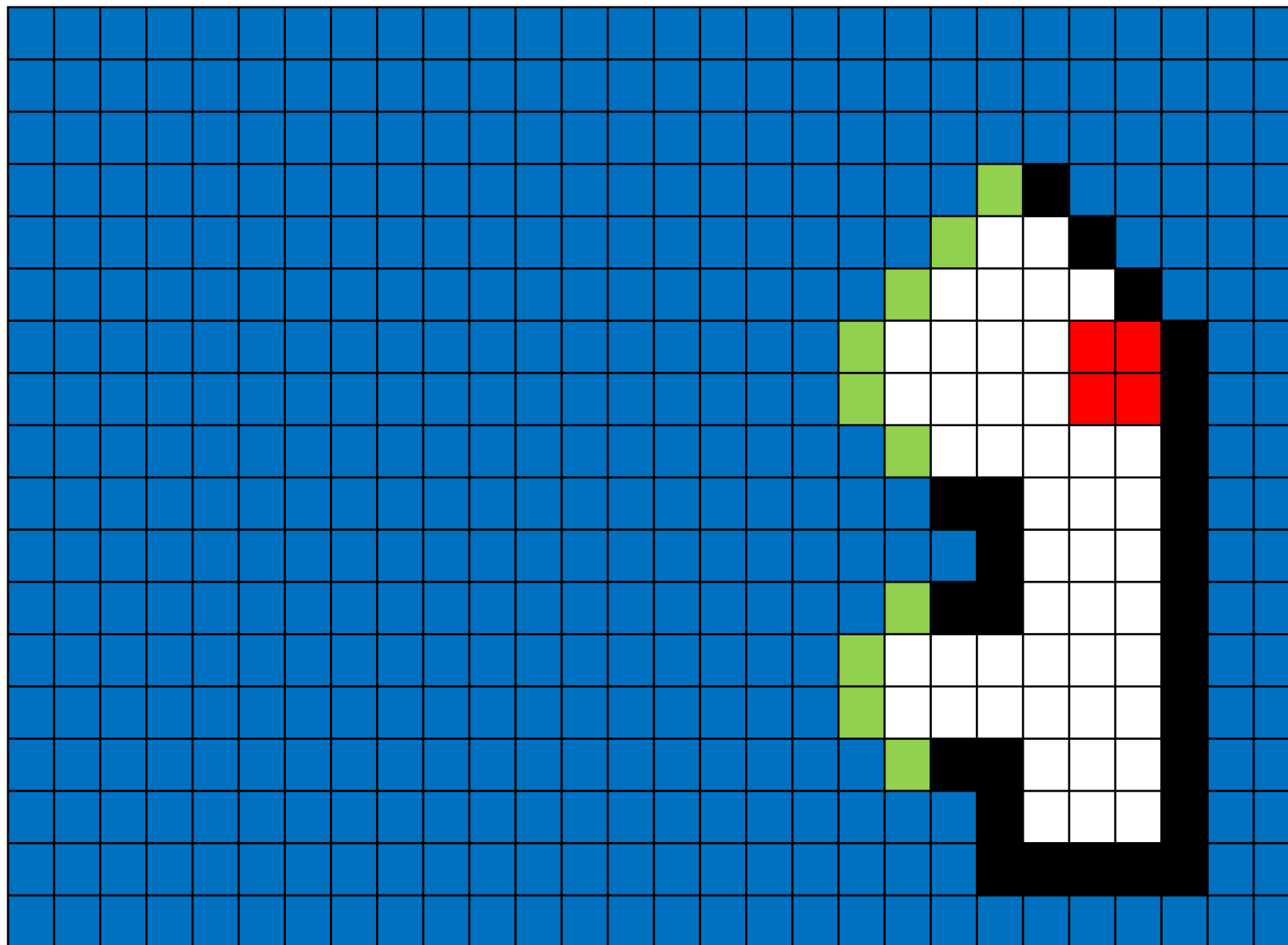
Grid generated by a Robot => boundary shape



Grid generated by a Robot => boundary shape

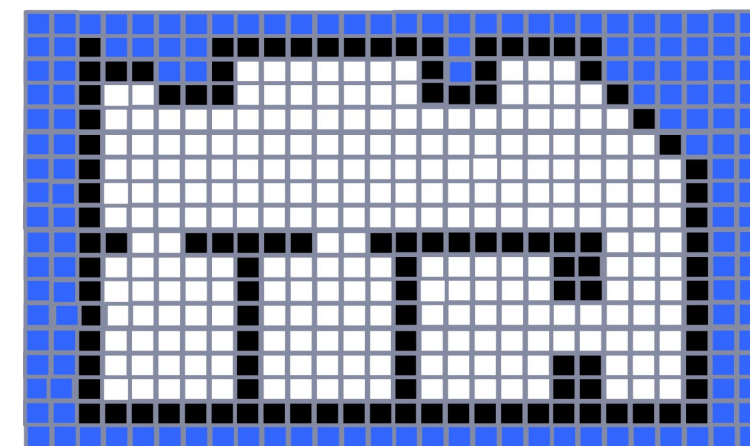
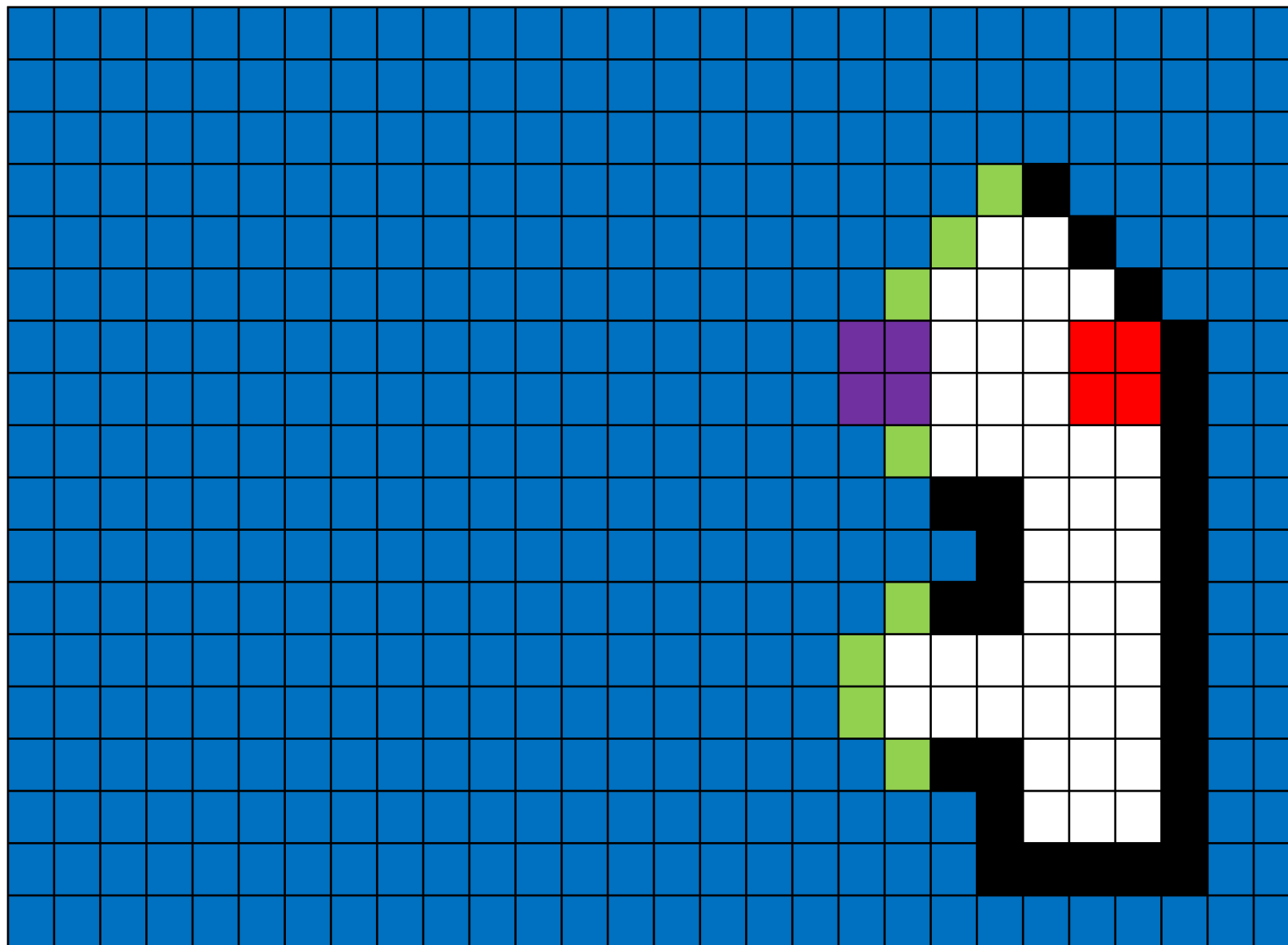


Grid generated by a Robot => boundary shape

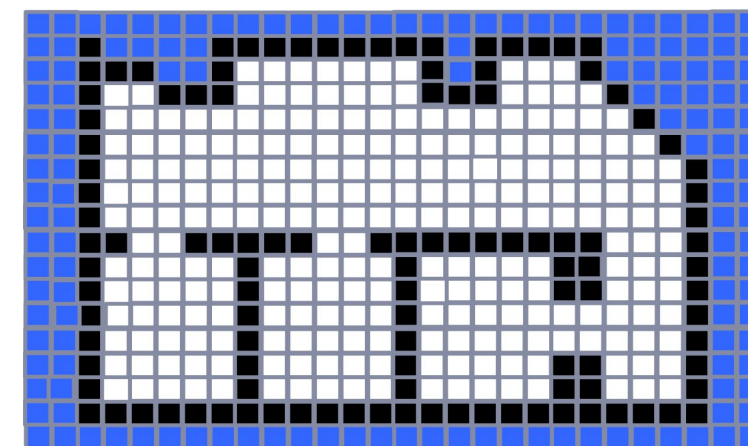
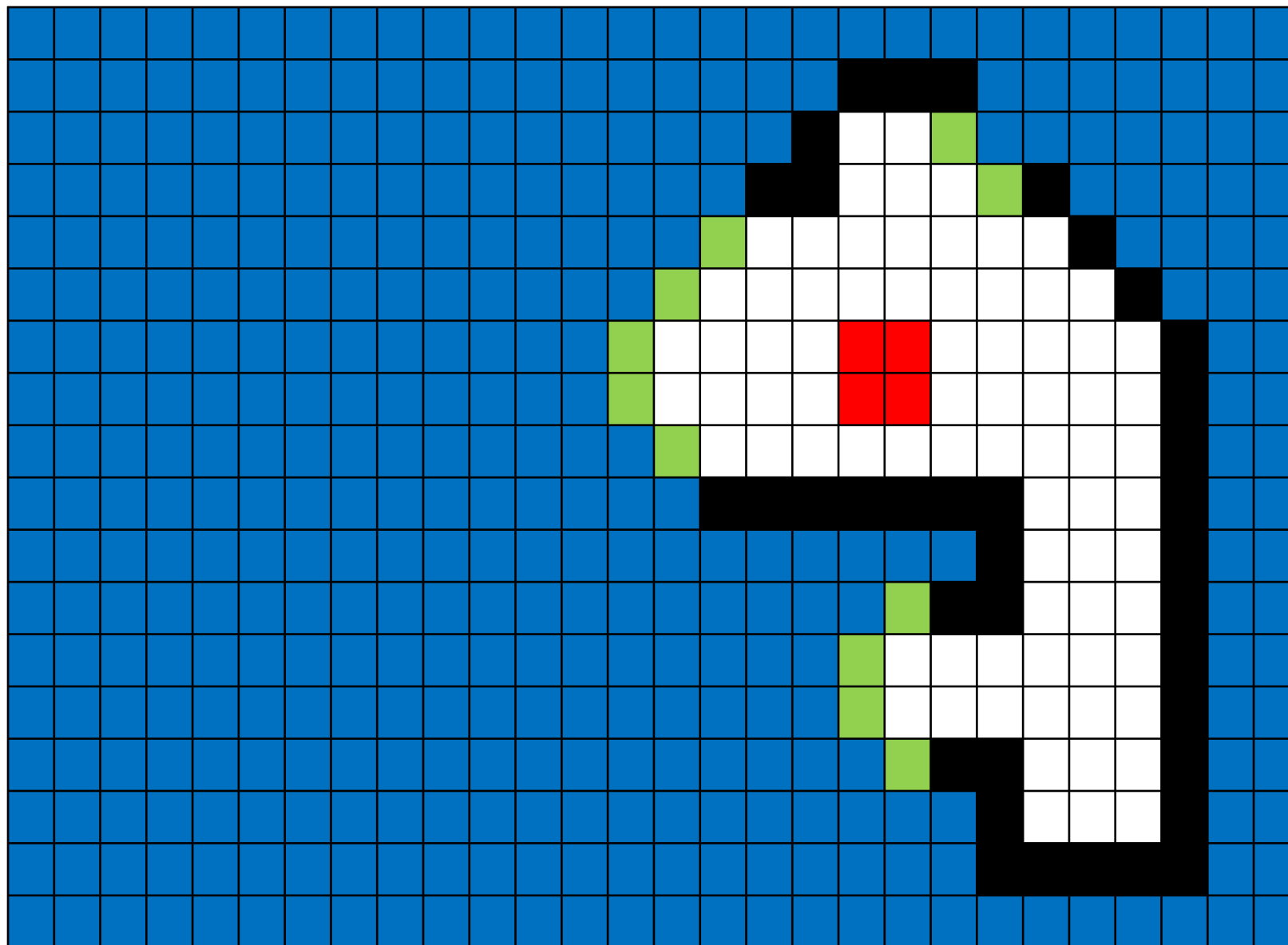


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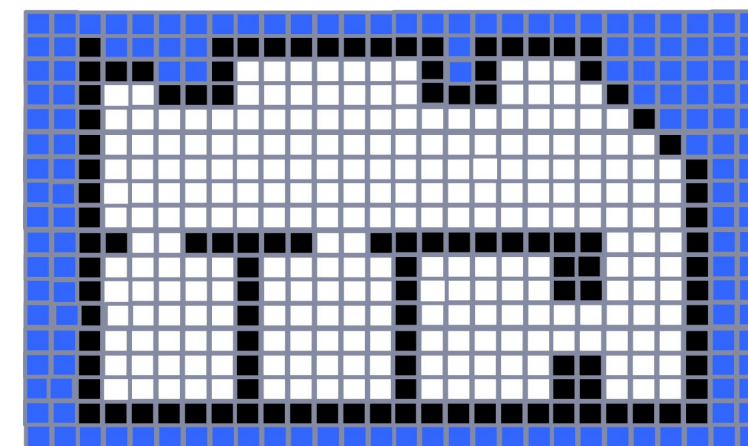
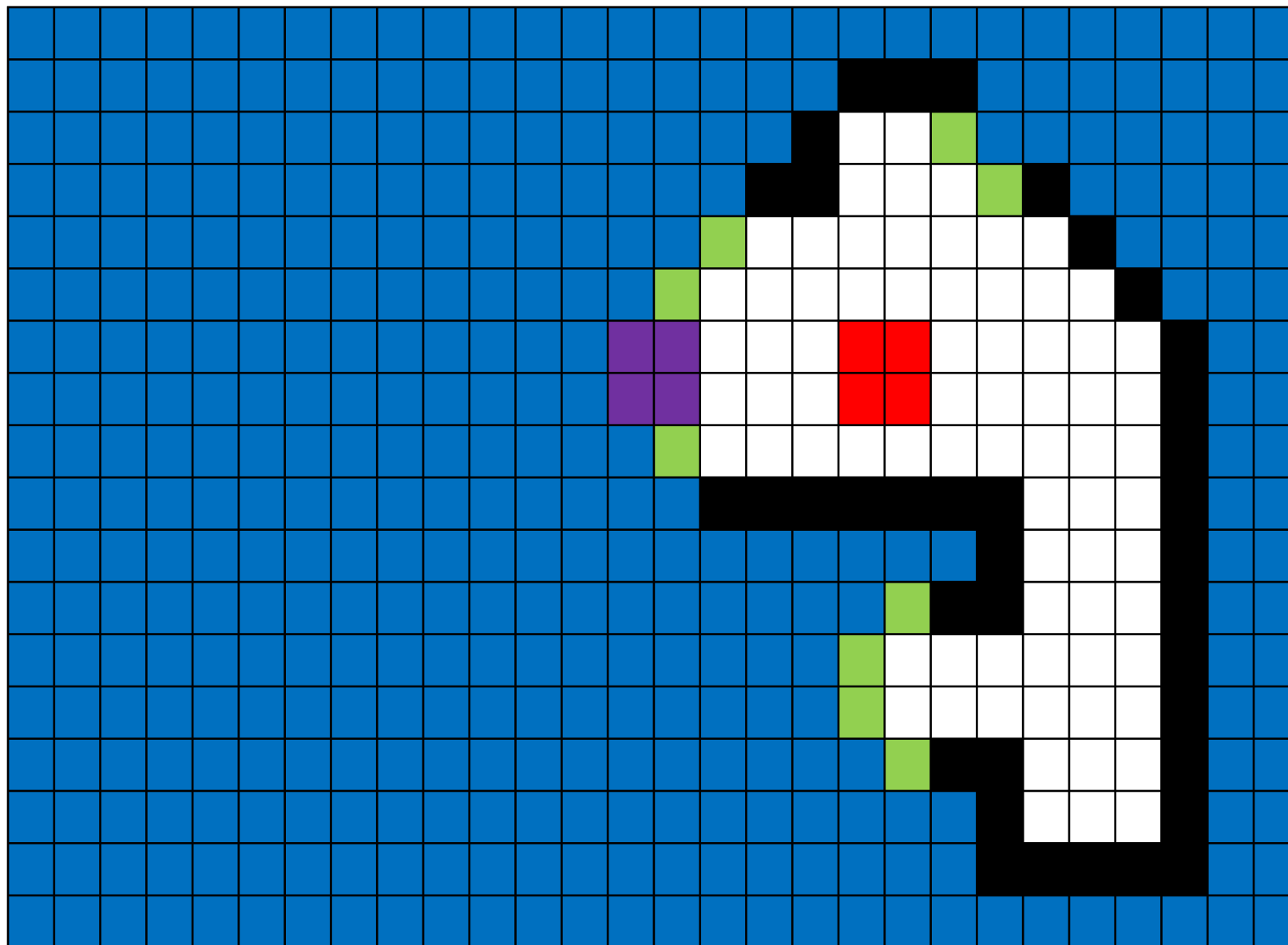




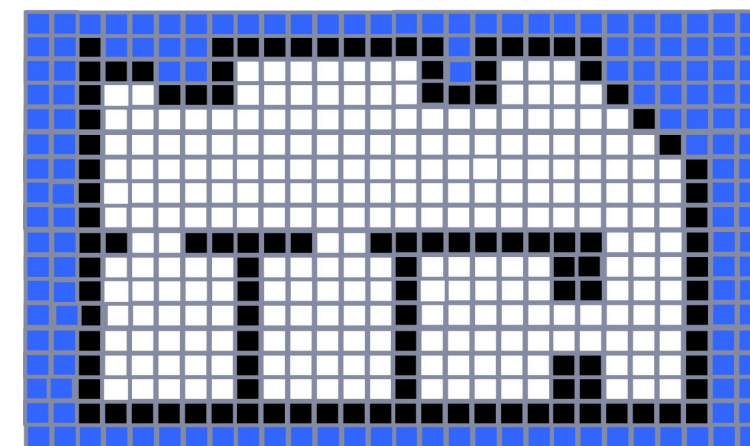
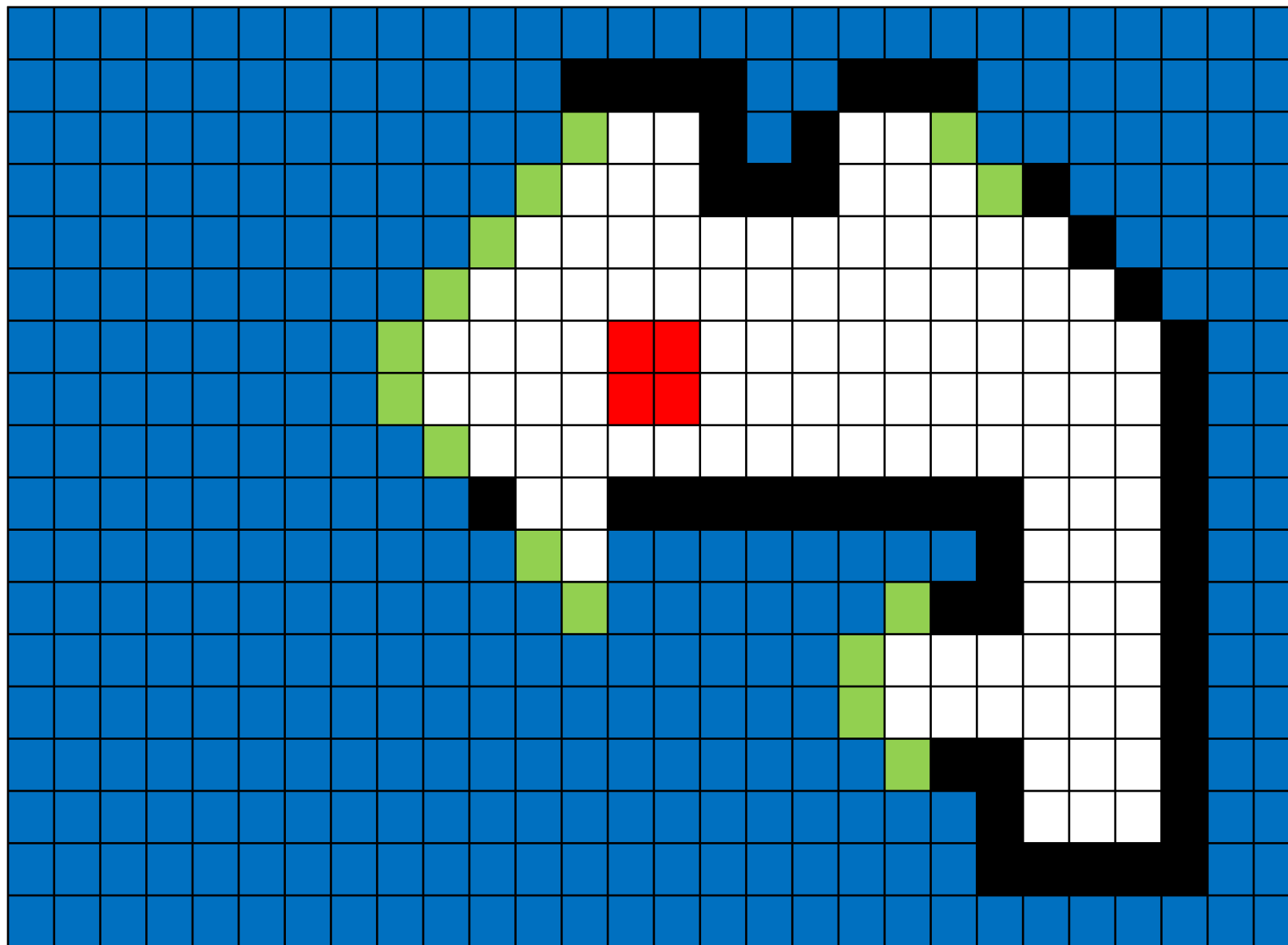
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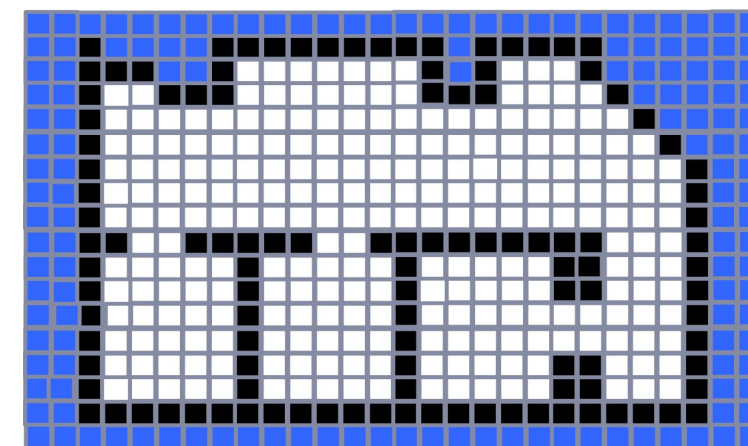
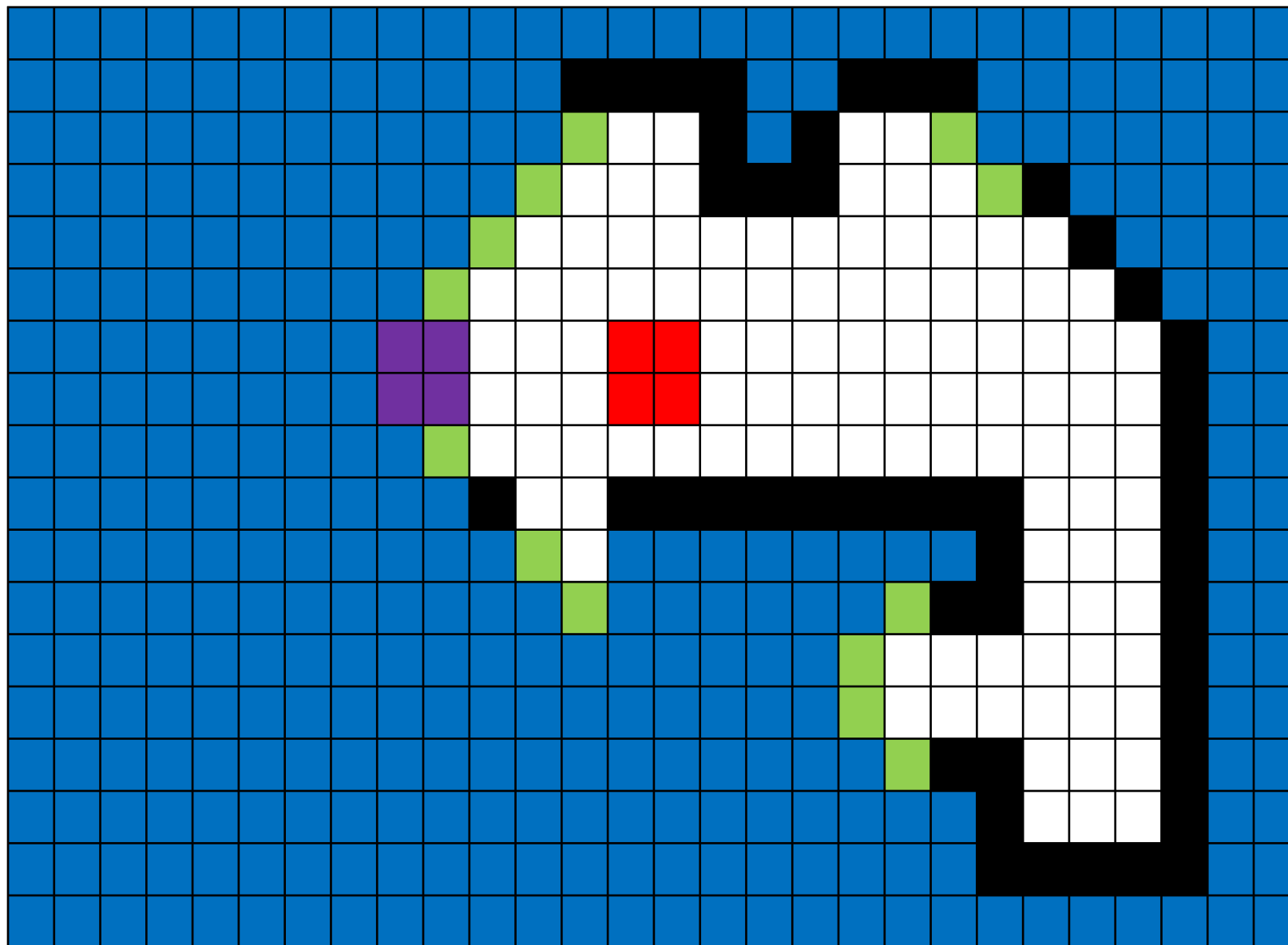
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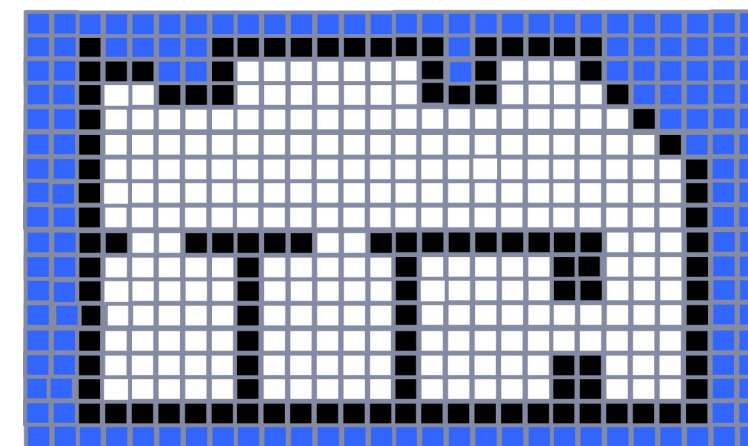
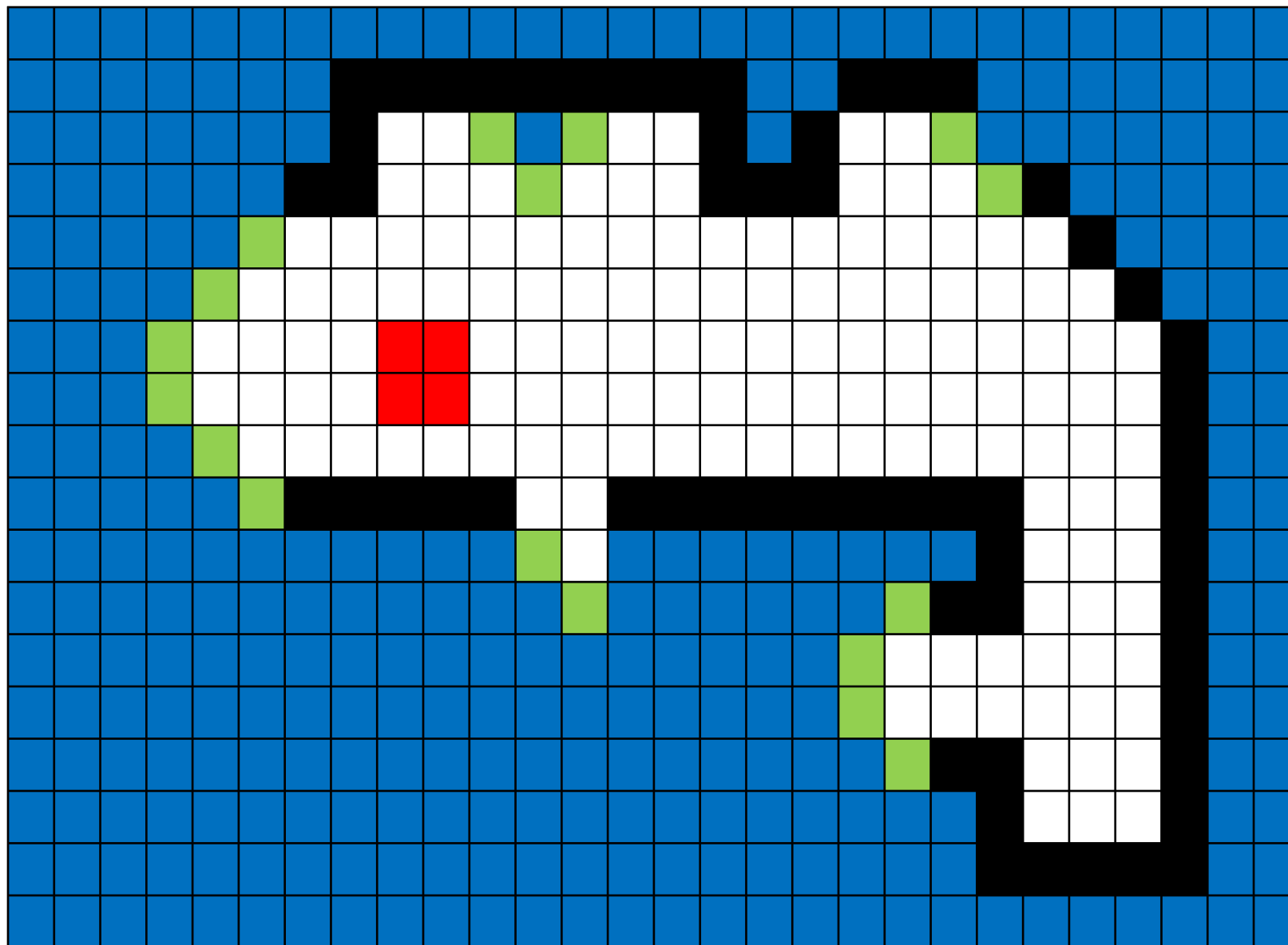
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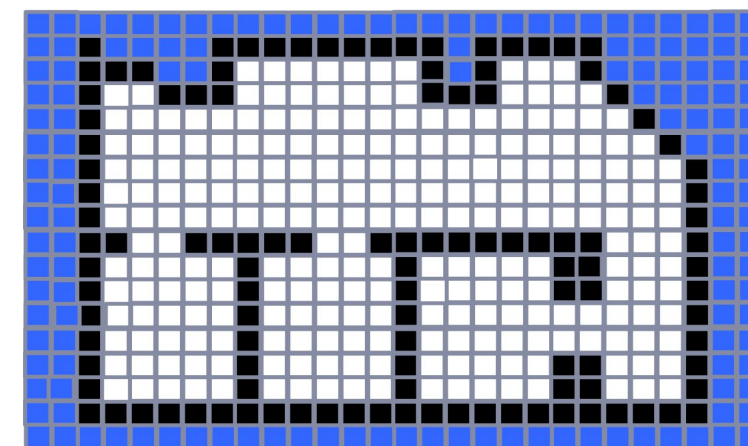
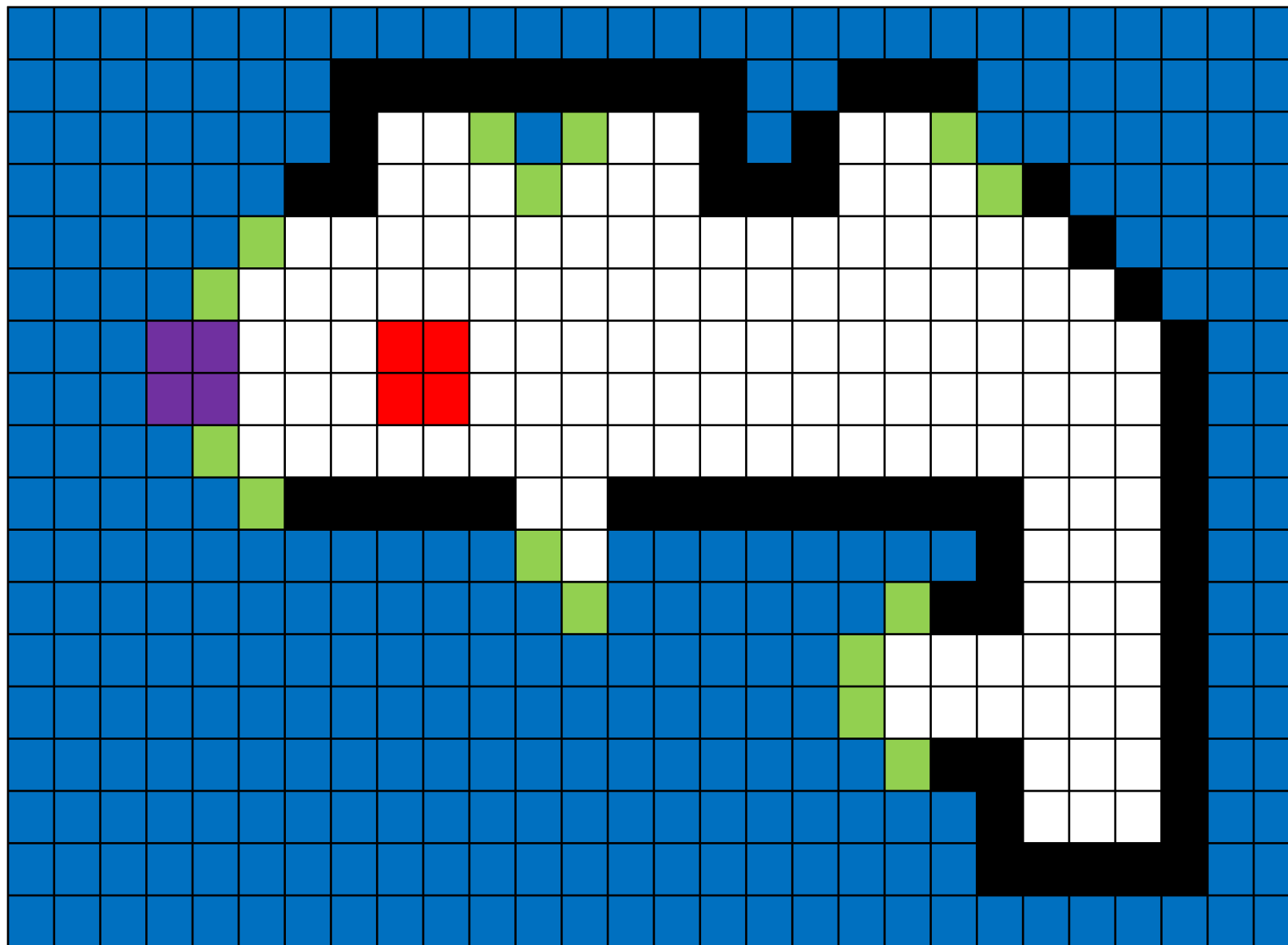
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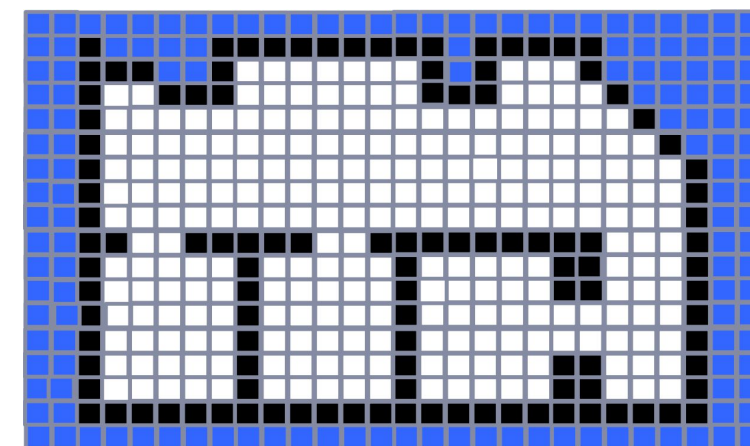
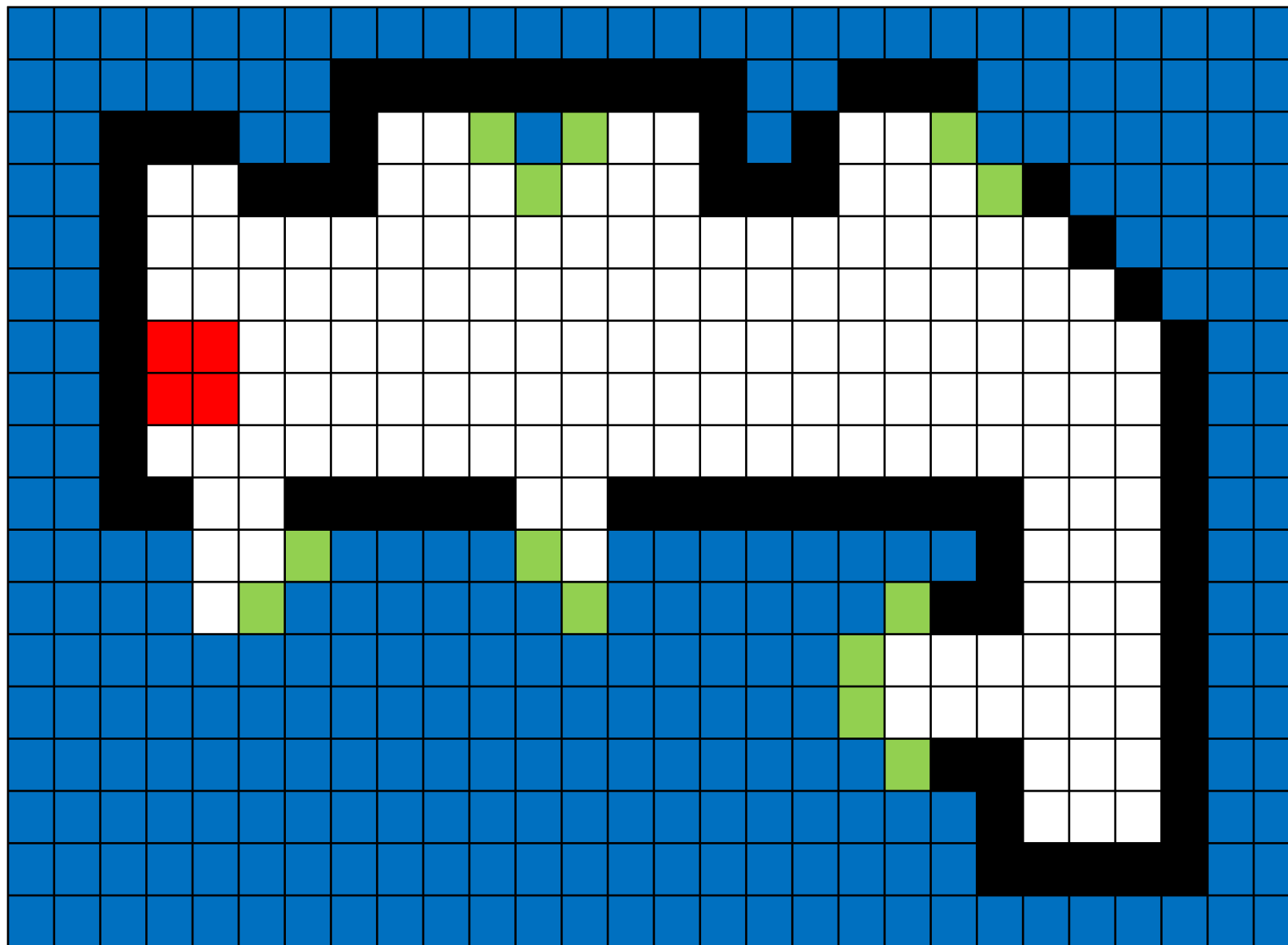
Grid generated by a Robot => boundary shape



Grid generated by a Robot => boundary shape

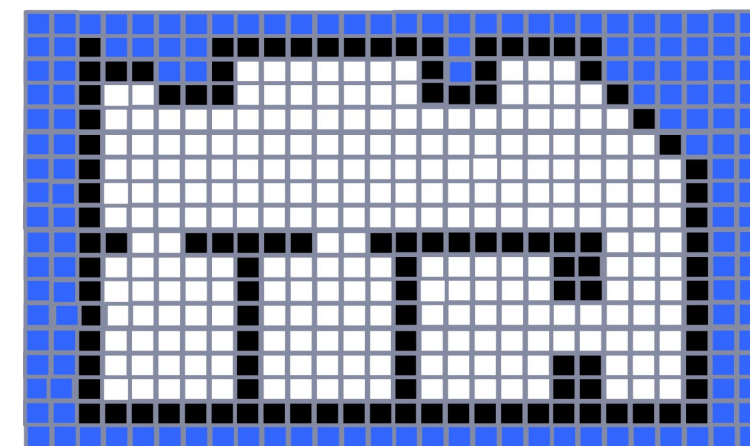
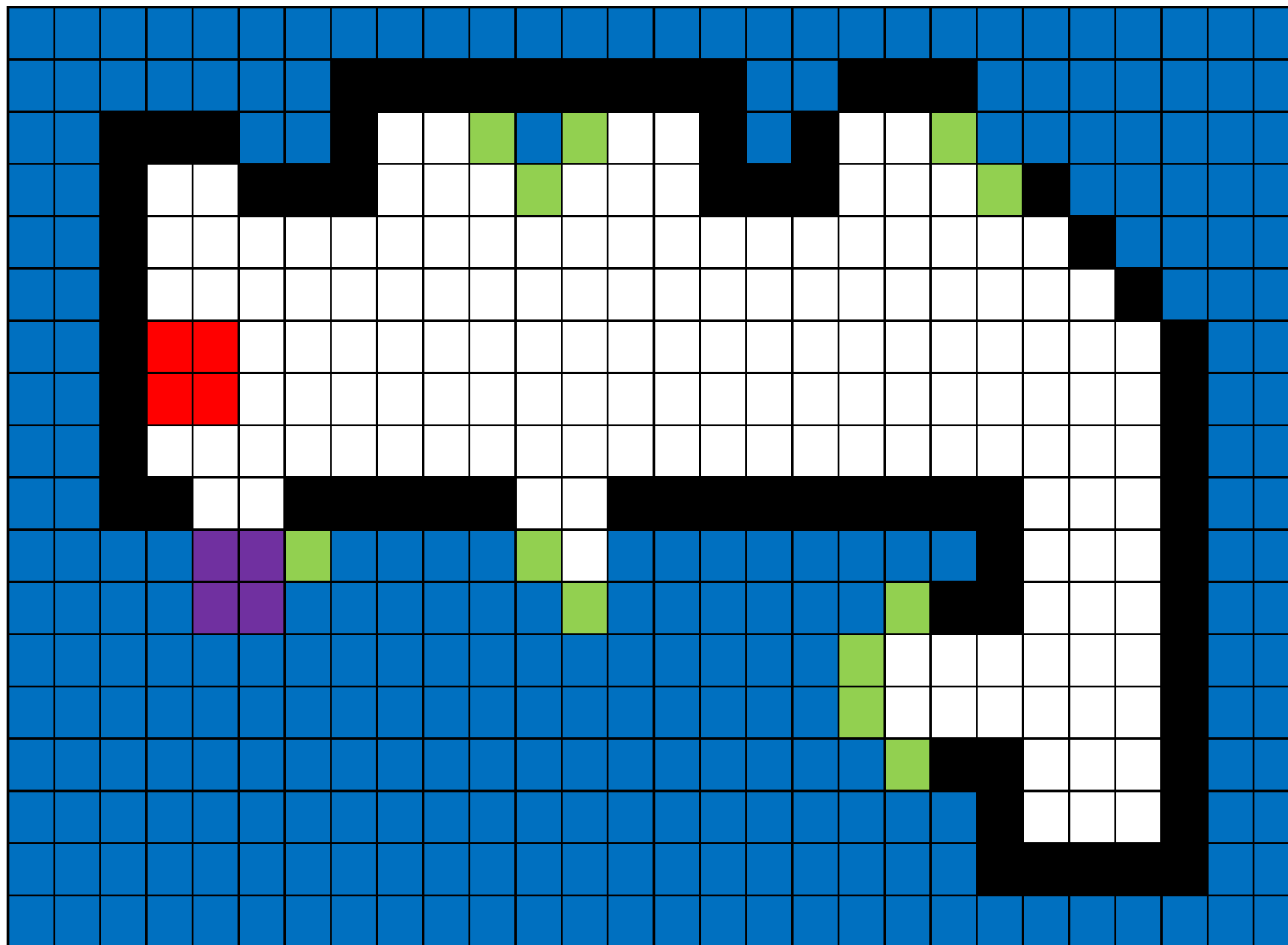


Grid generated by a Robot => boundary shape

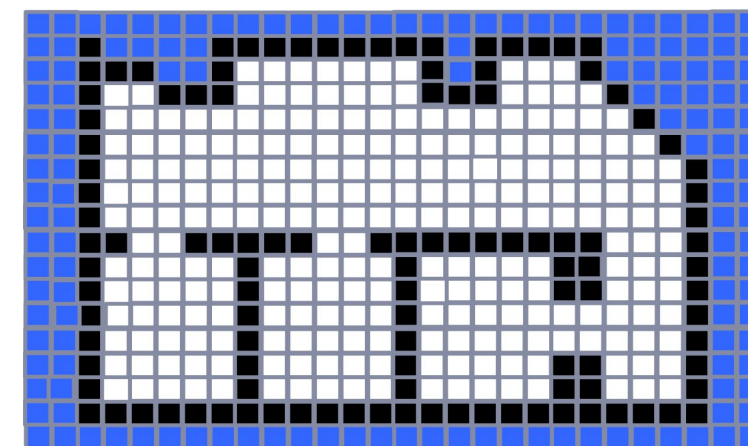
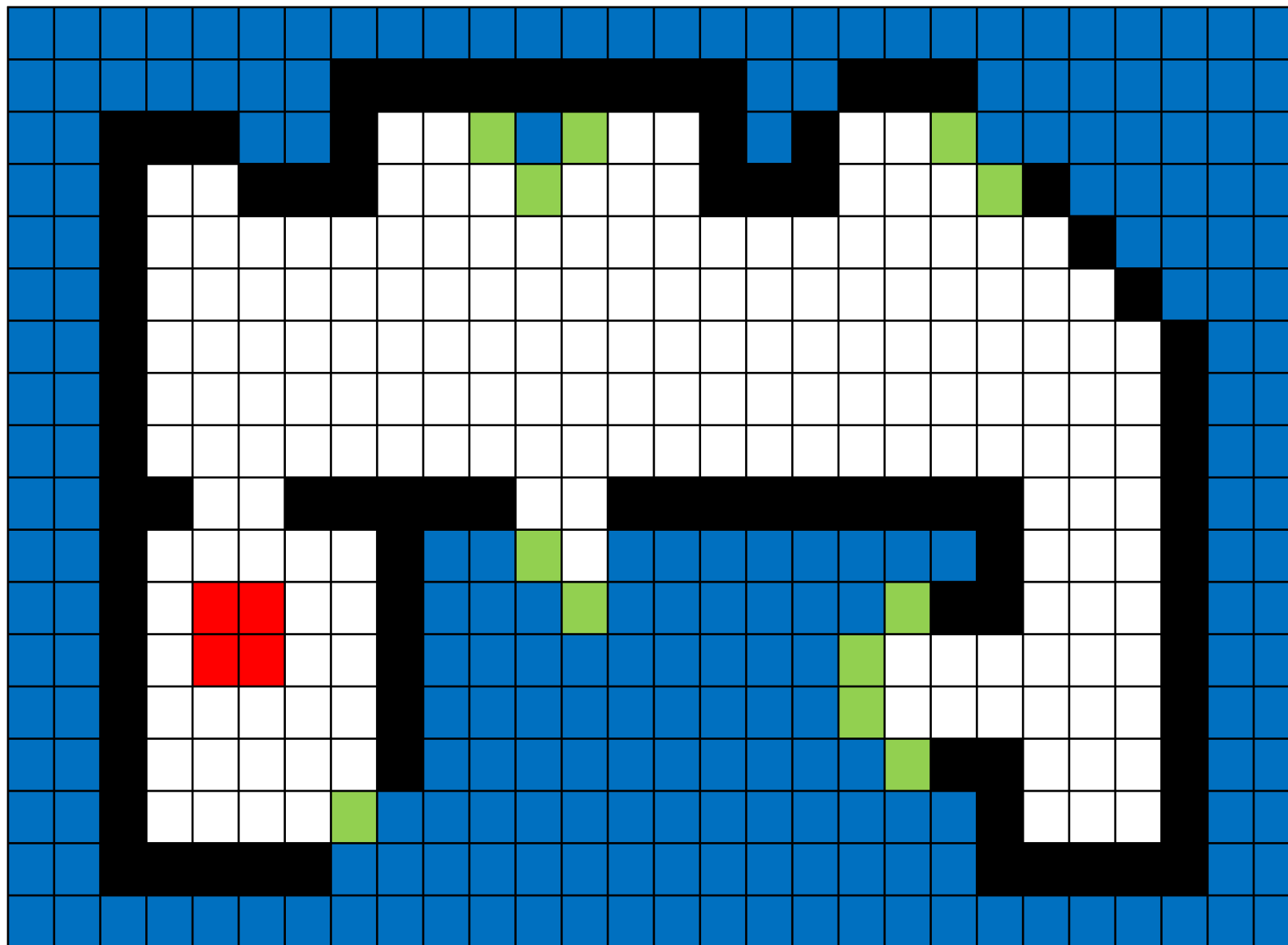


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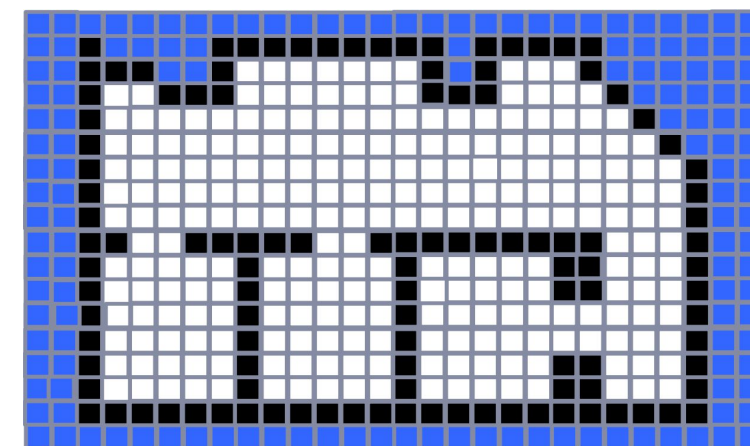
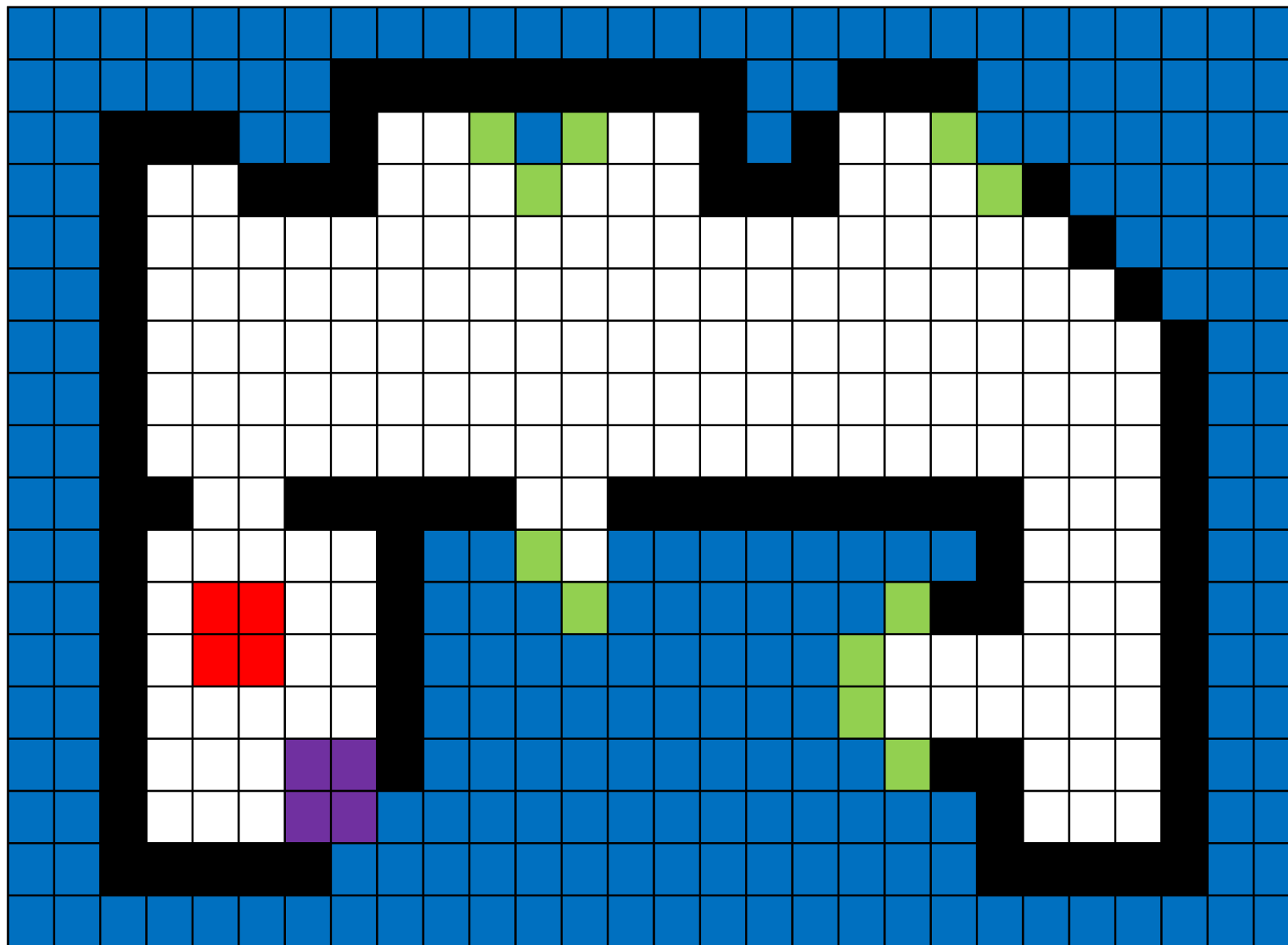




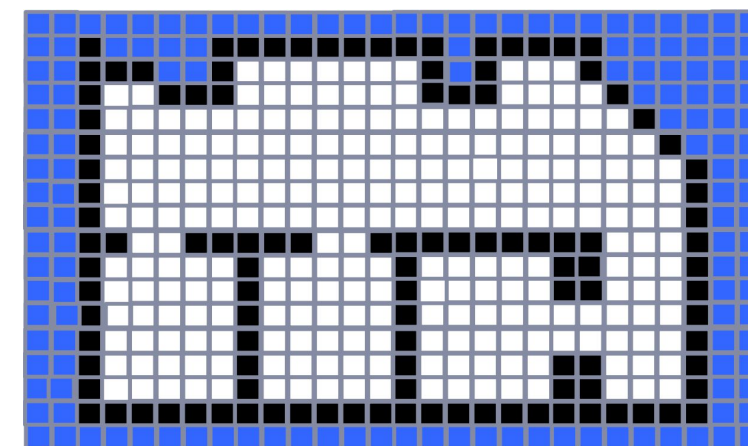
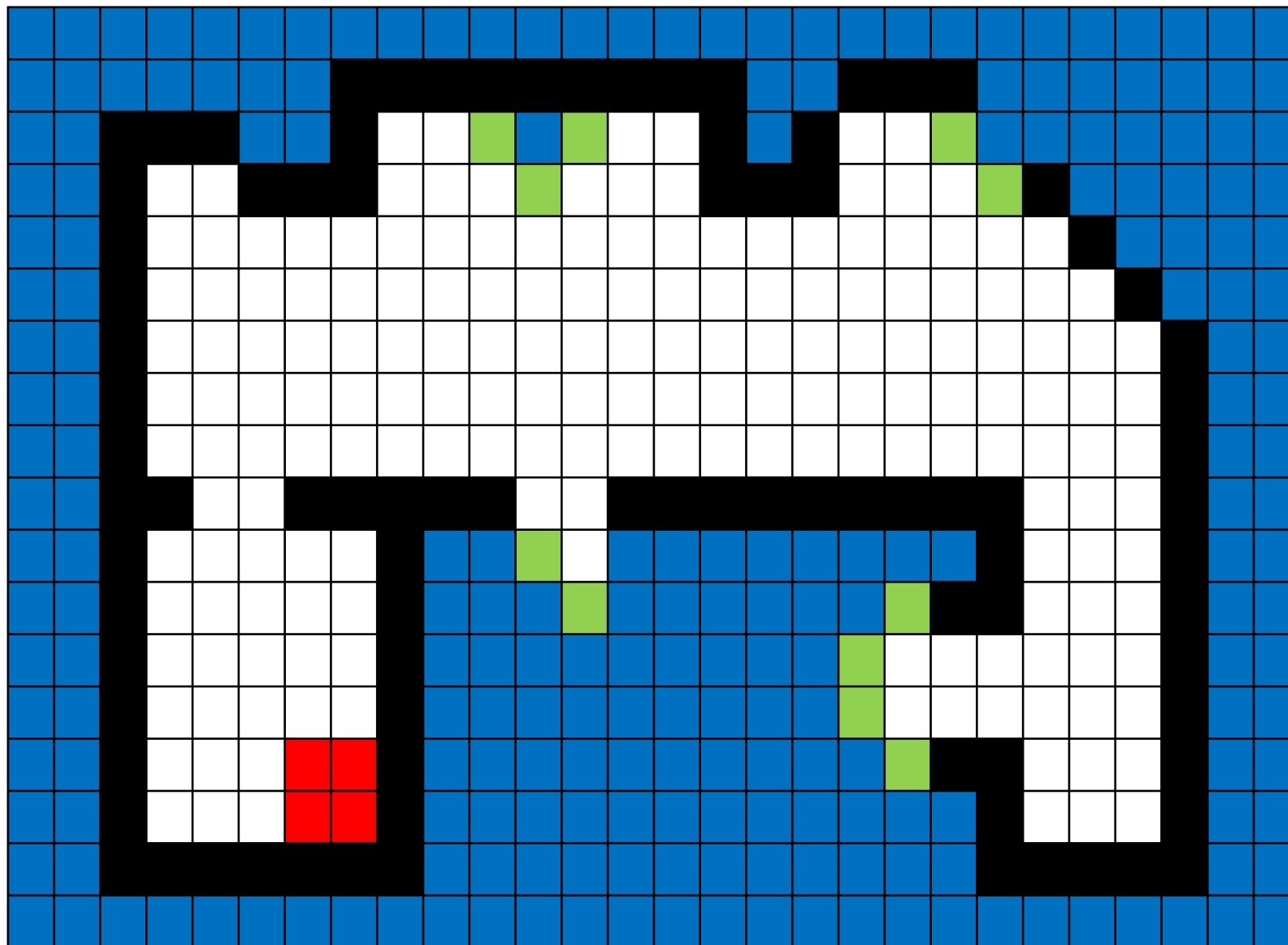
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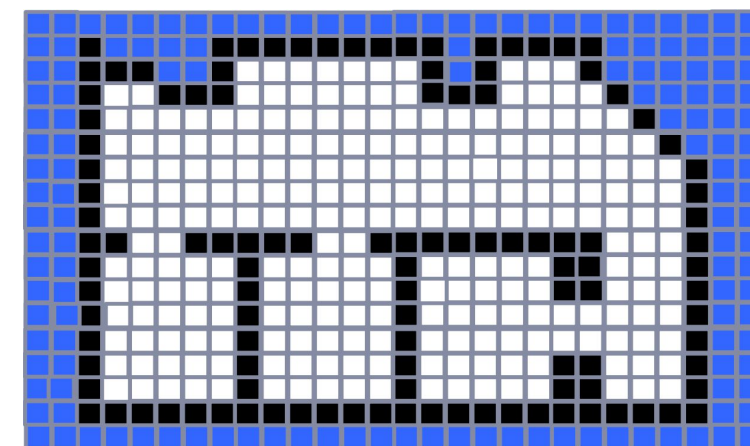
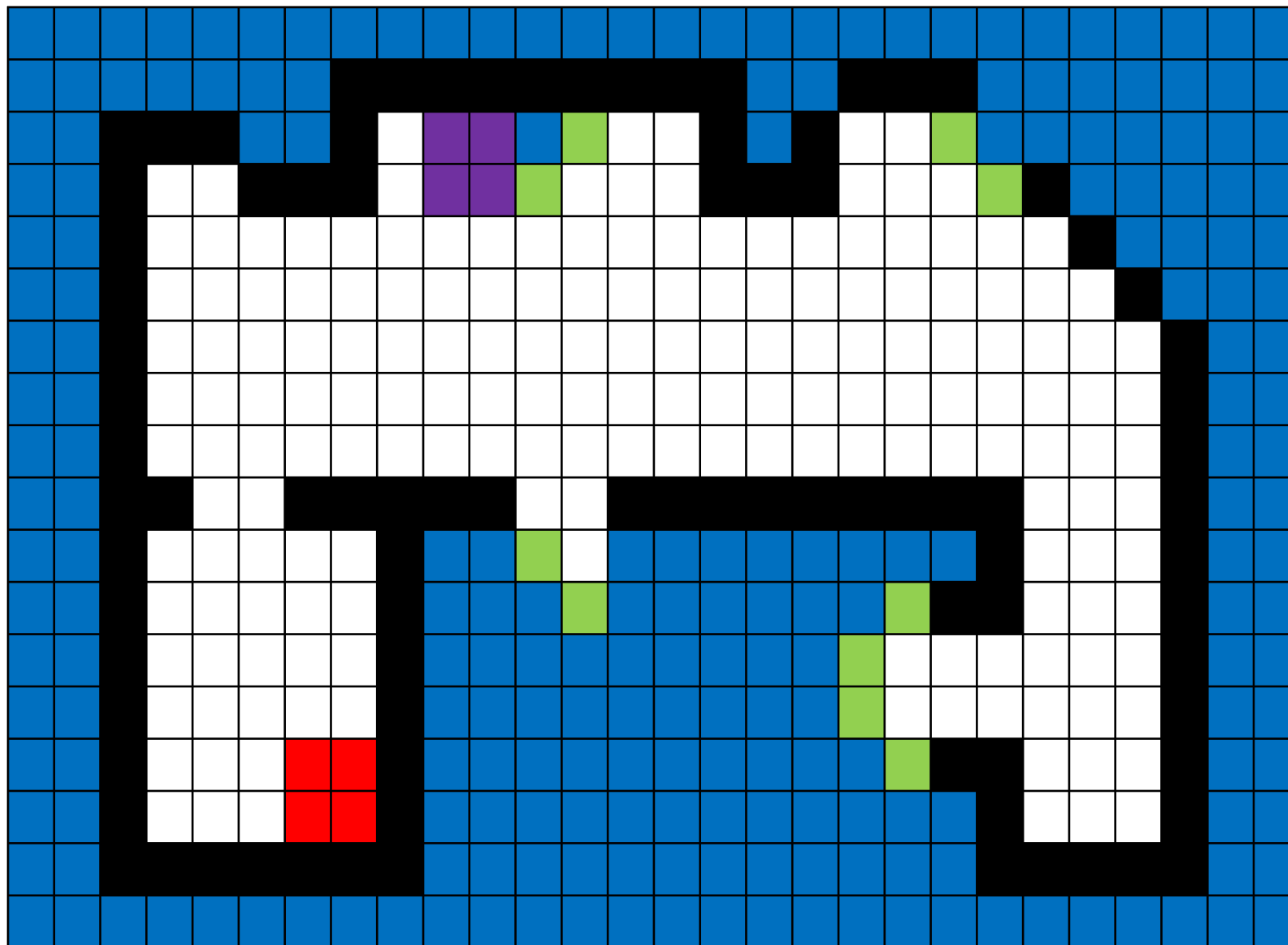
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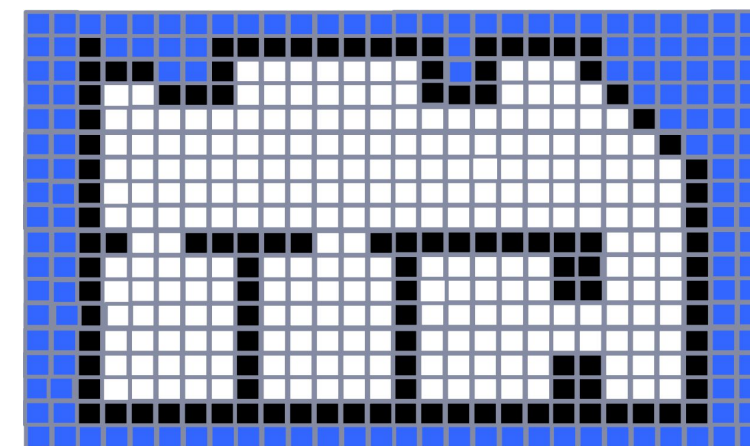
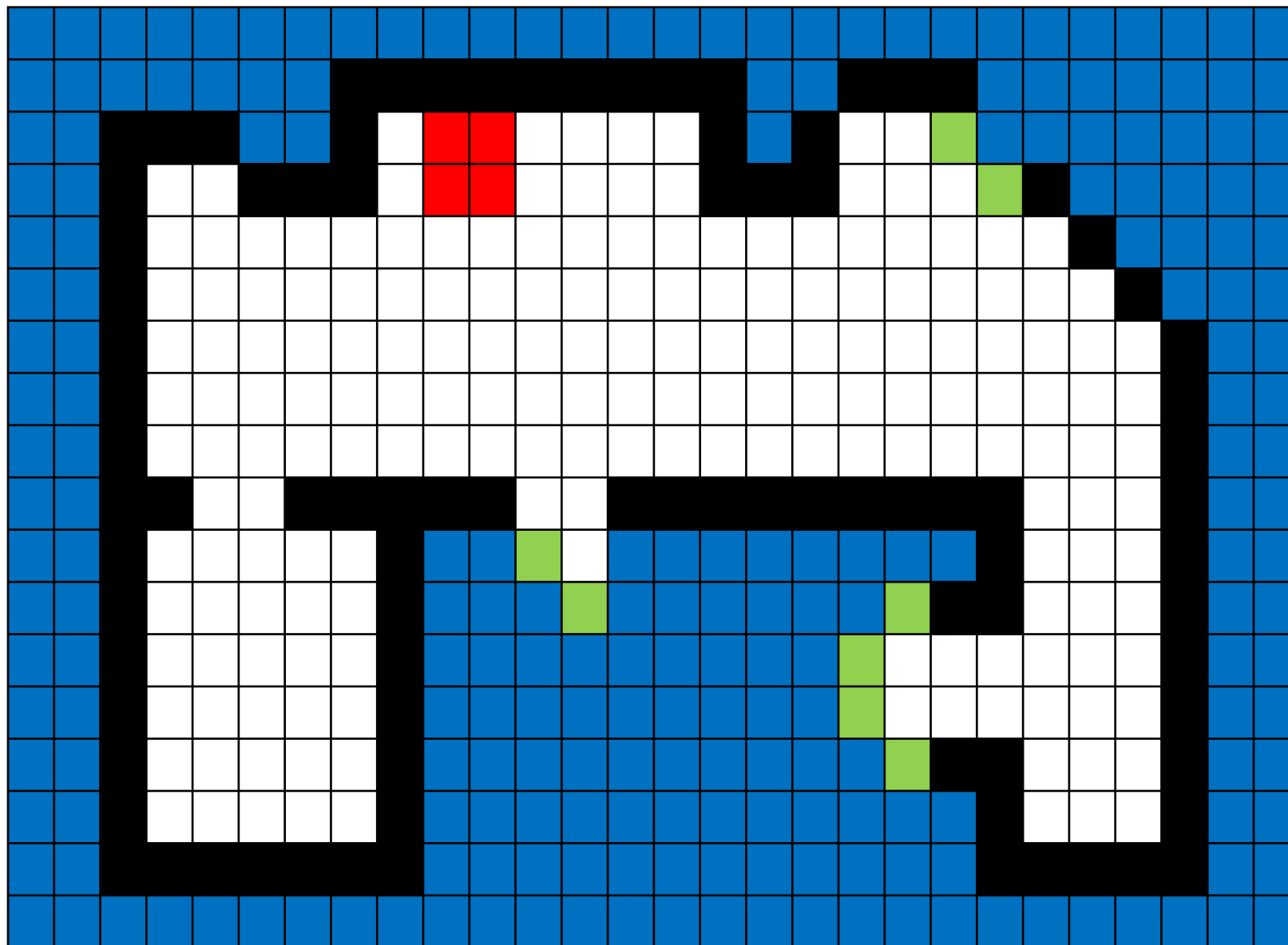
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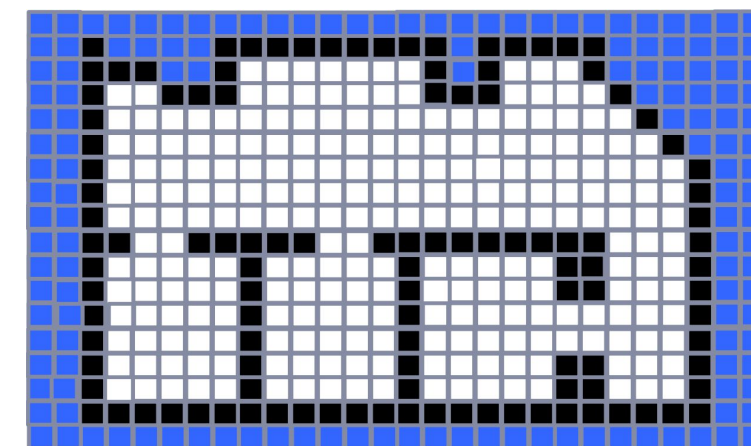
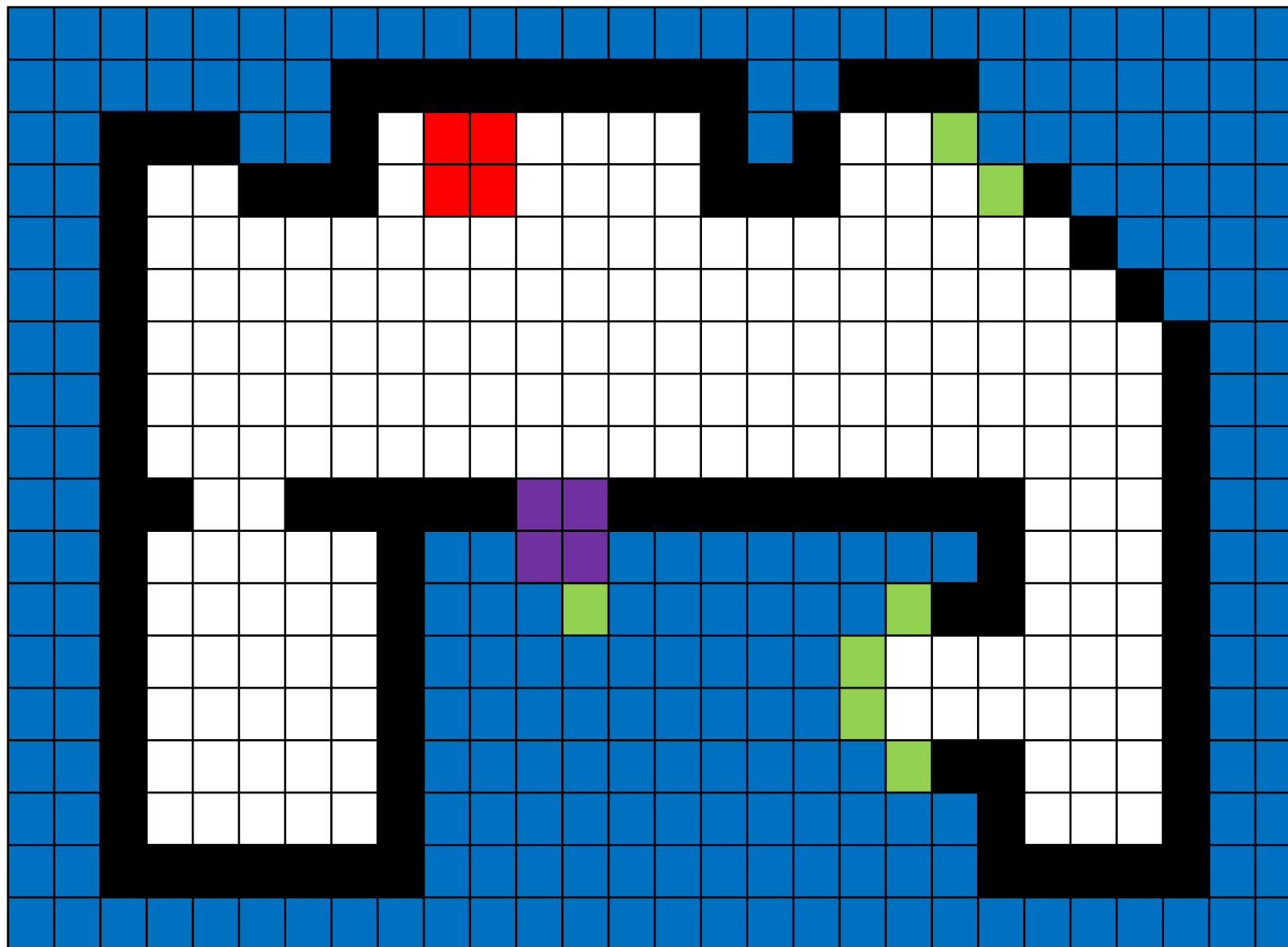
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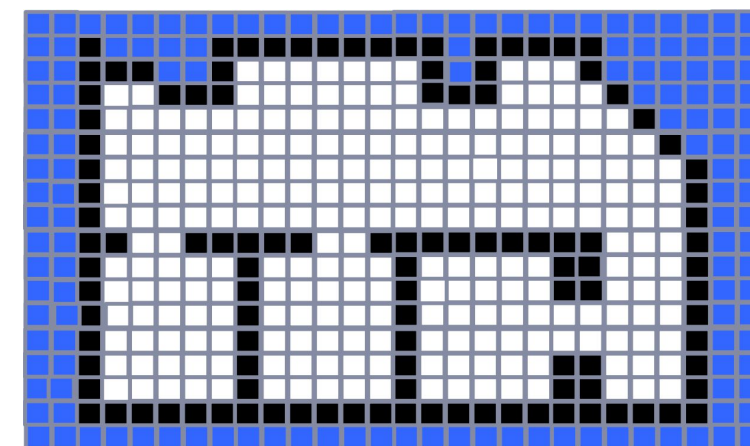
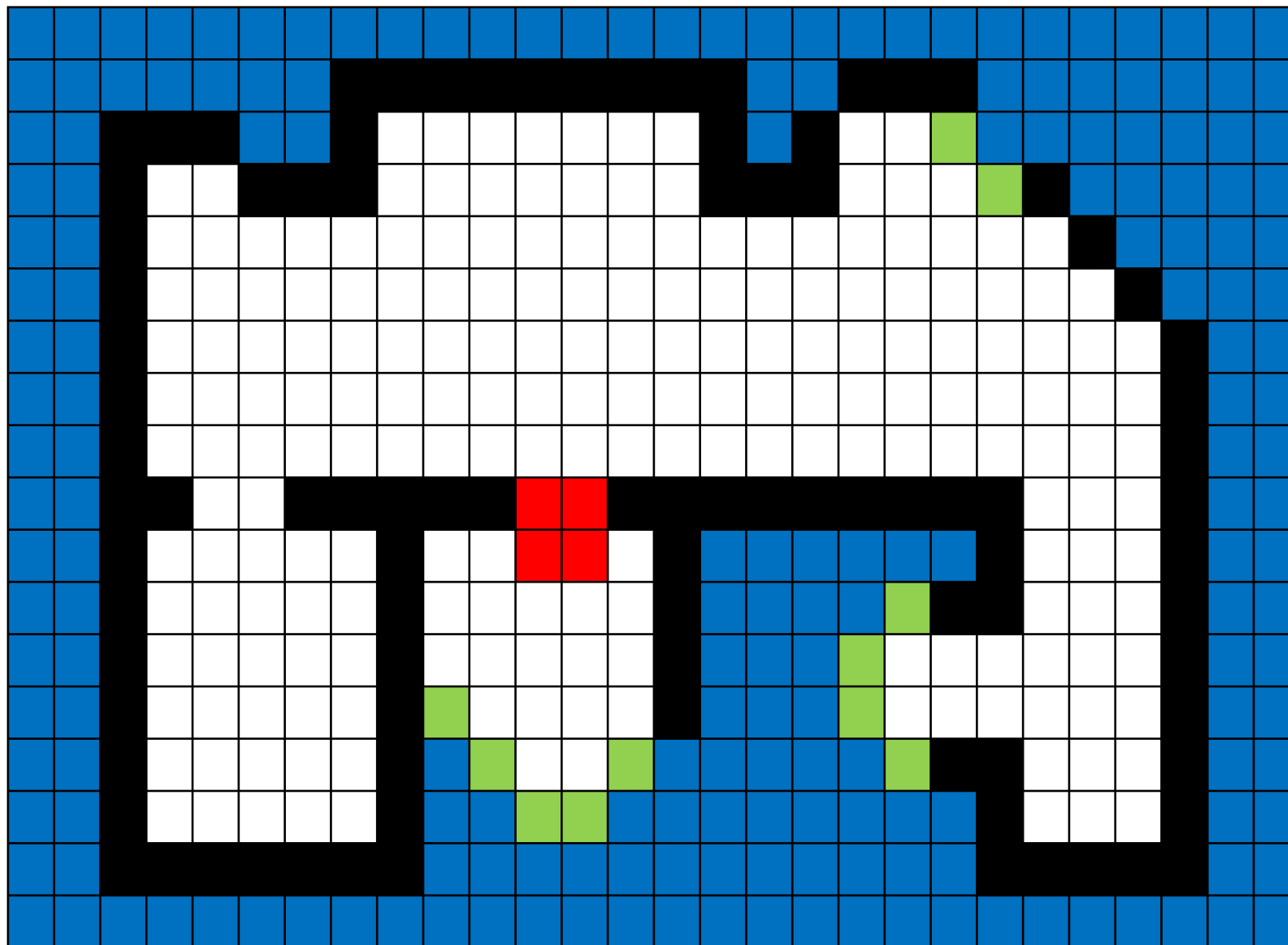
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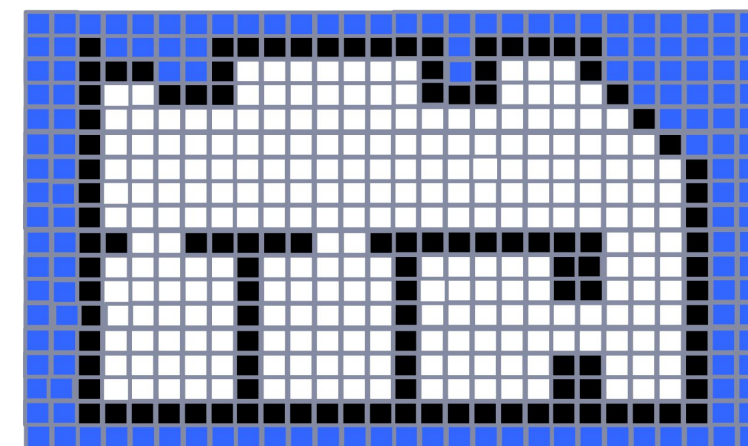
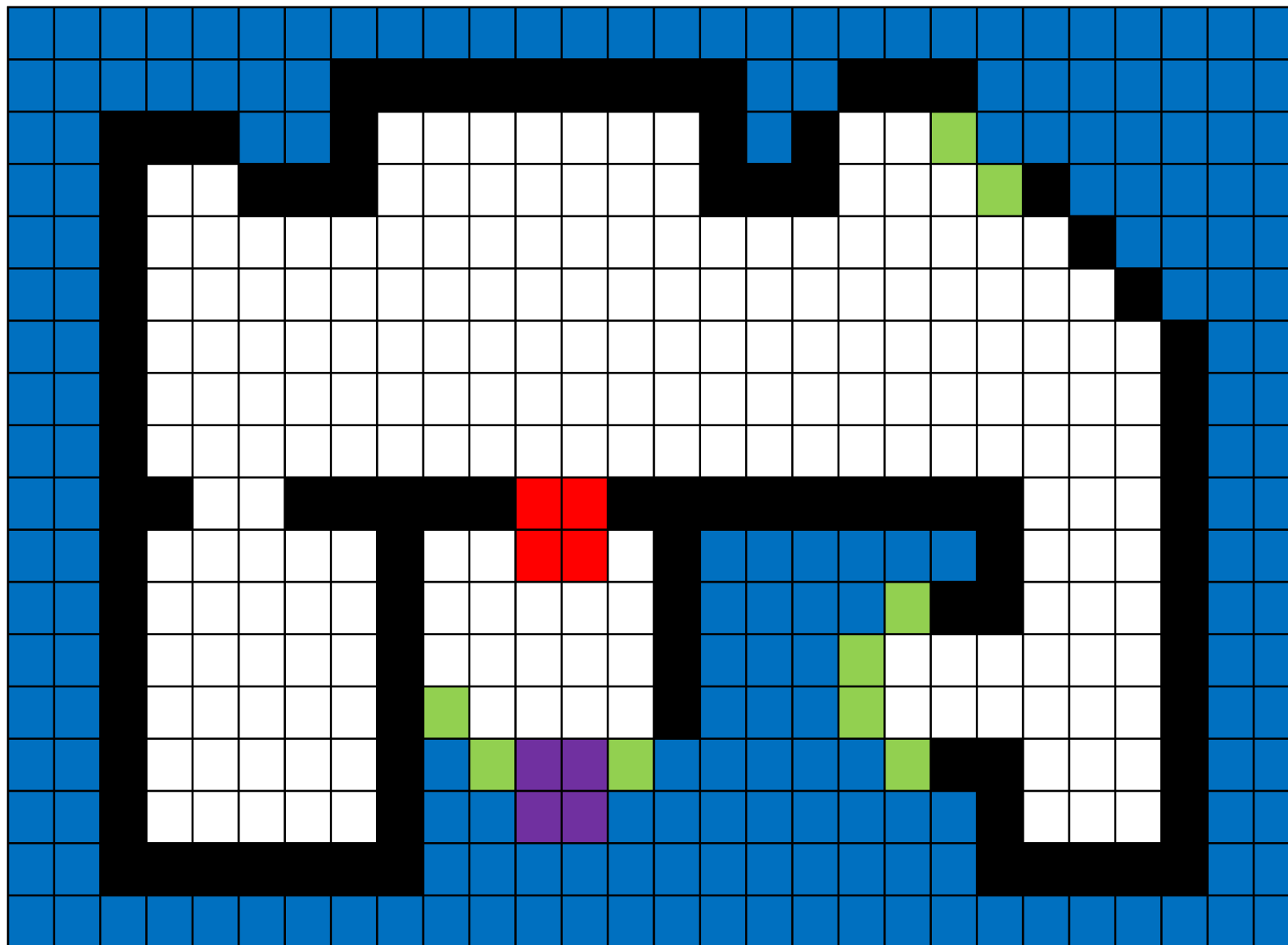


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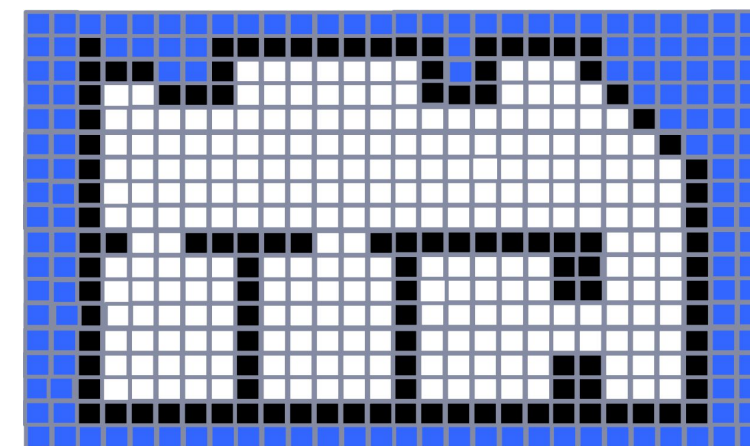
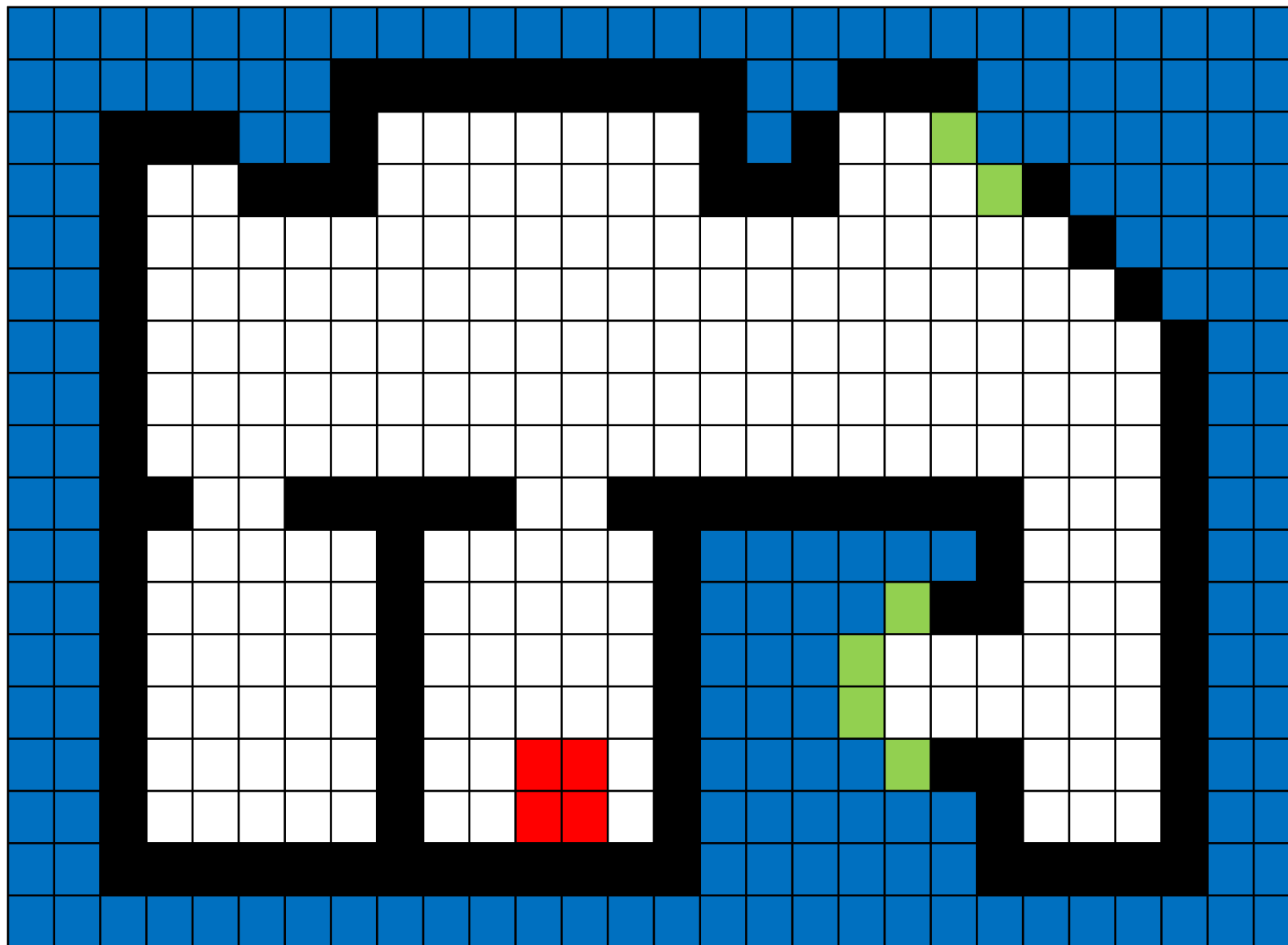


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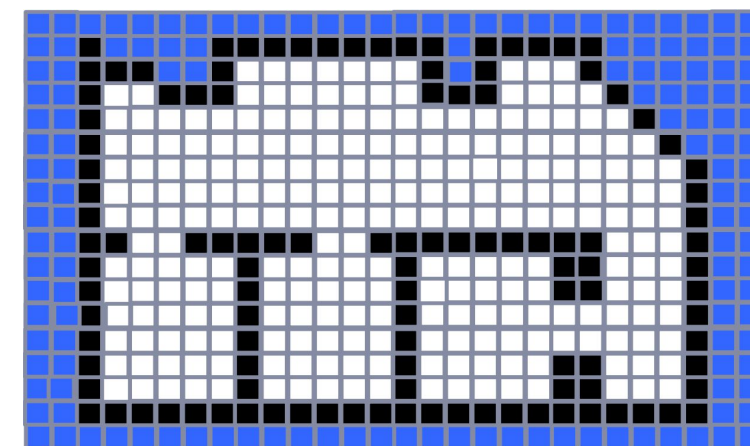
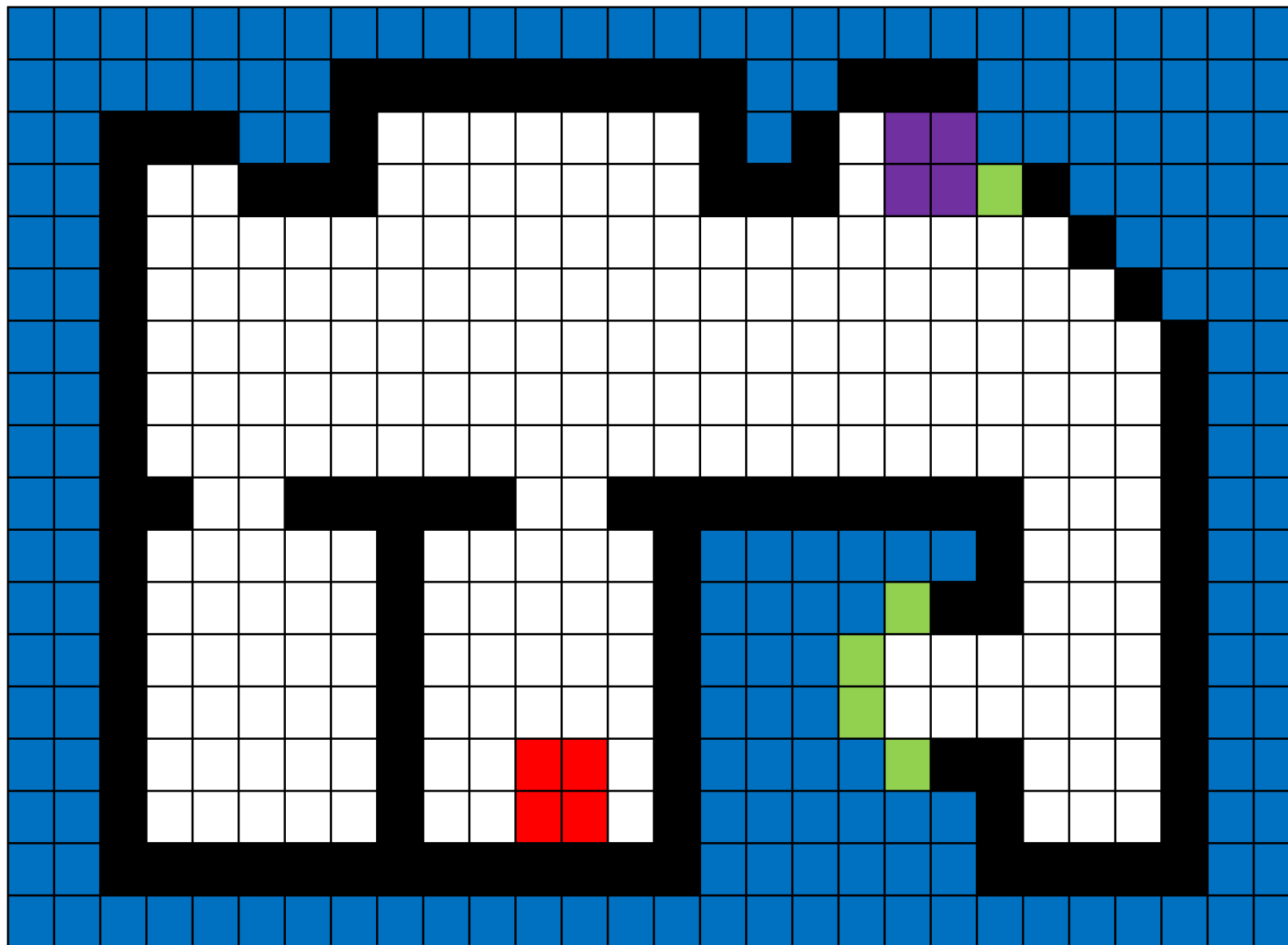




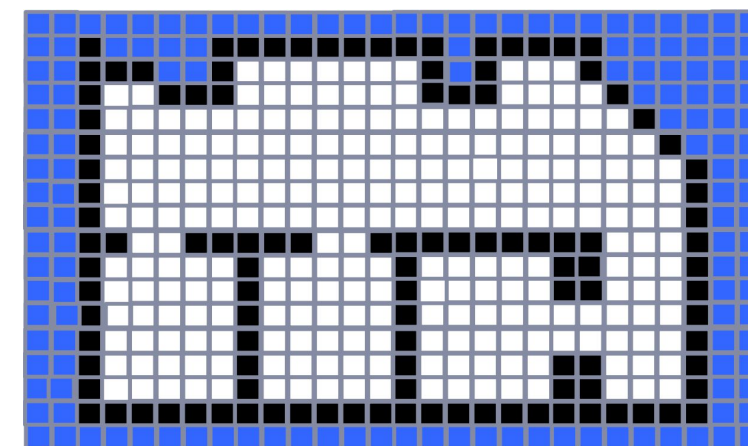
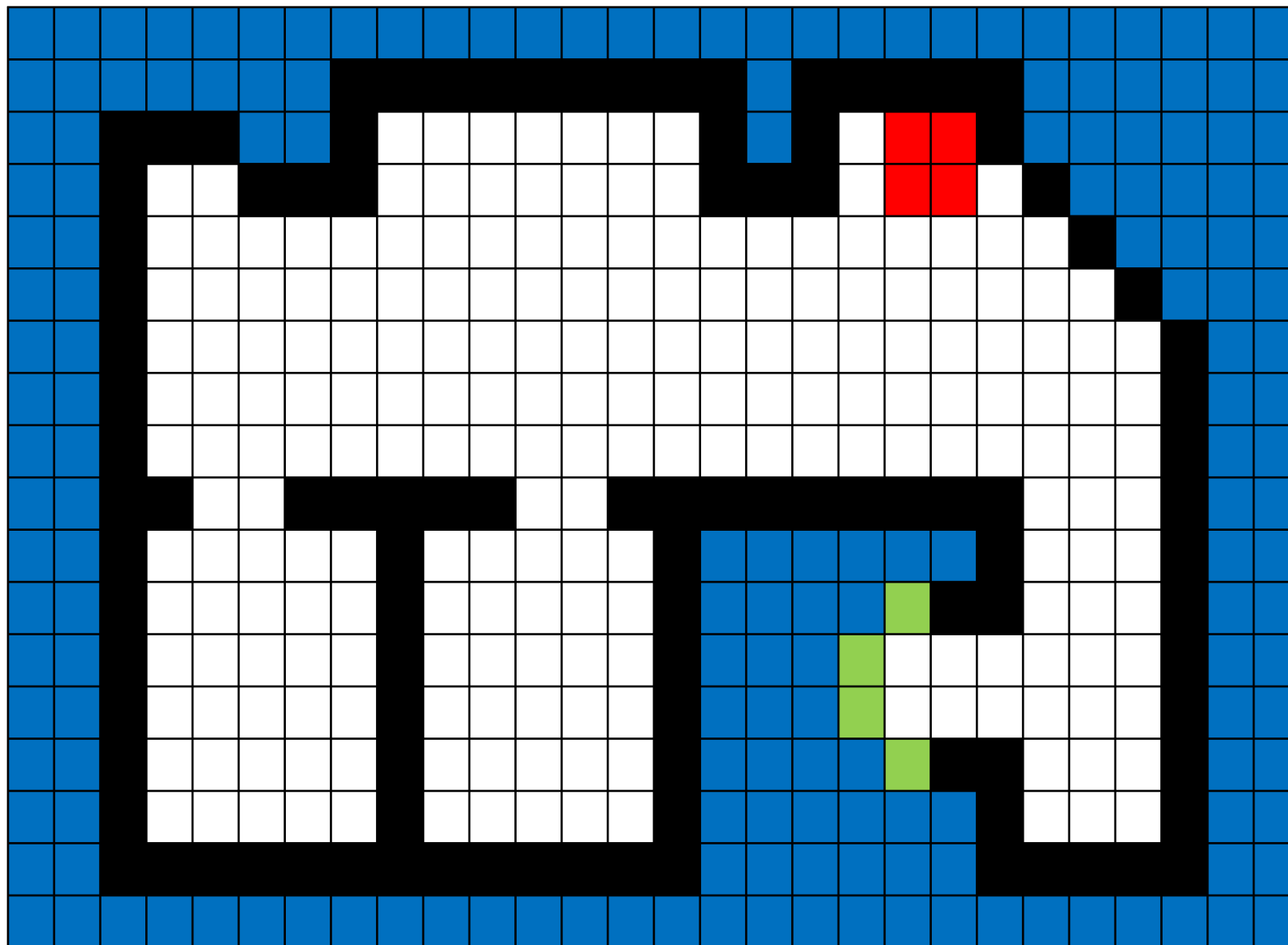
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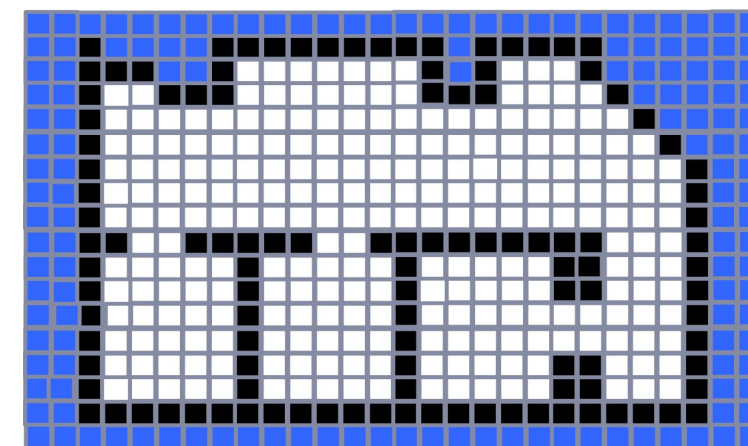
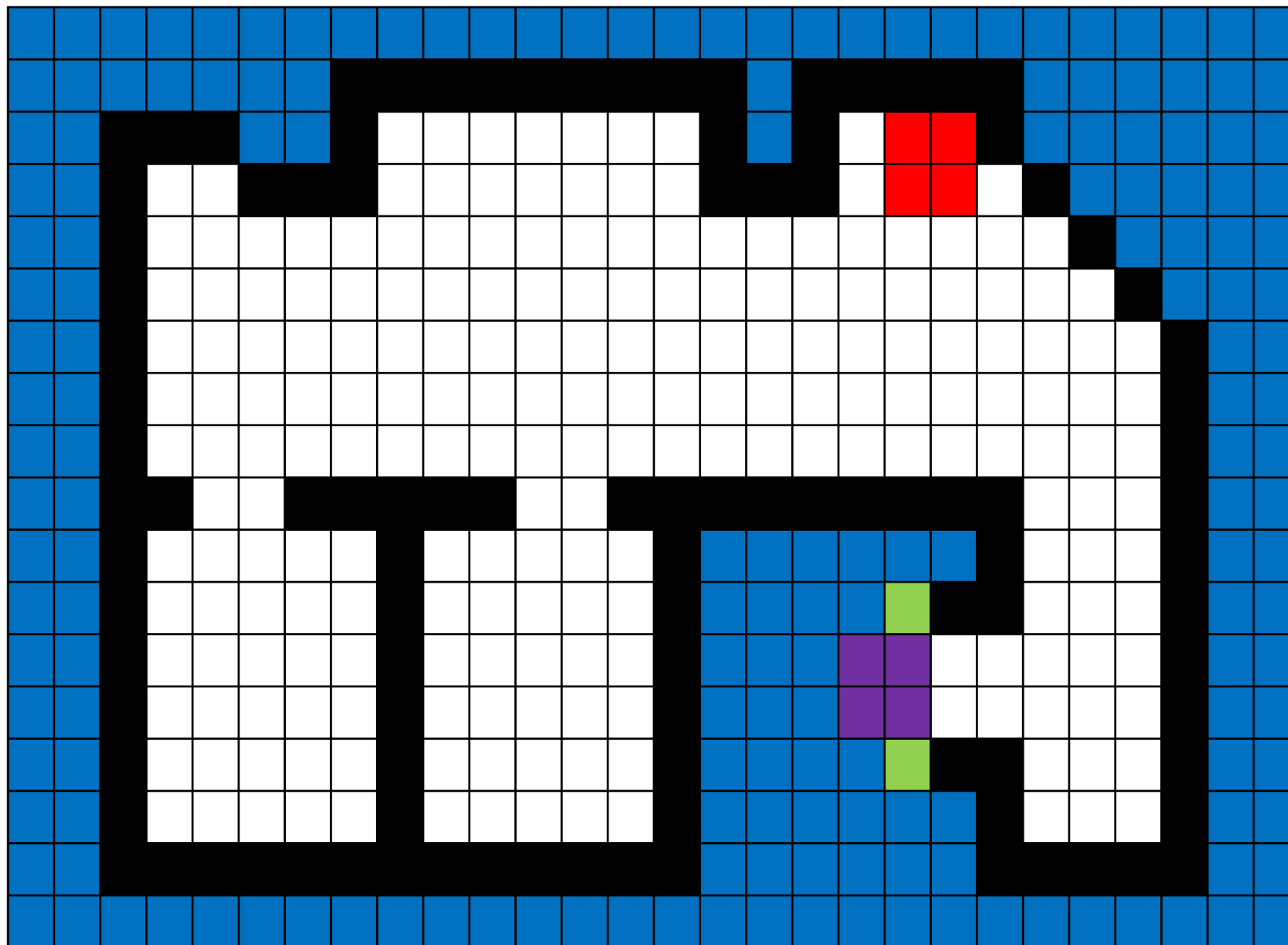
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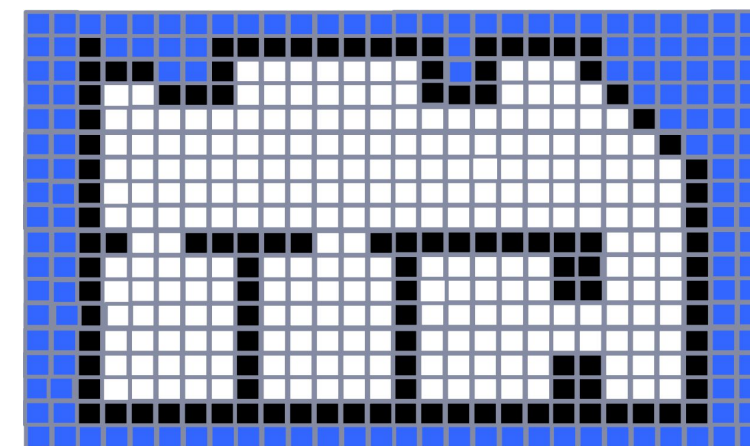
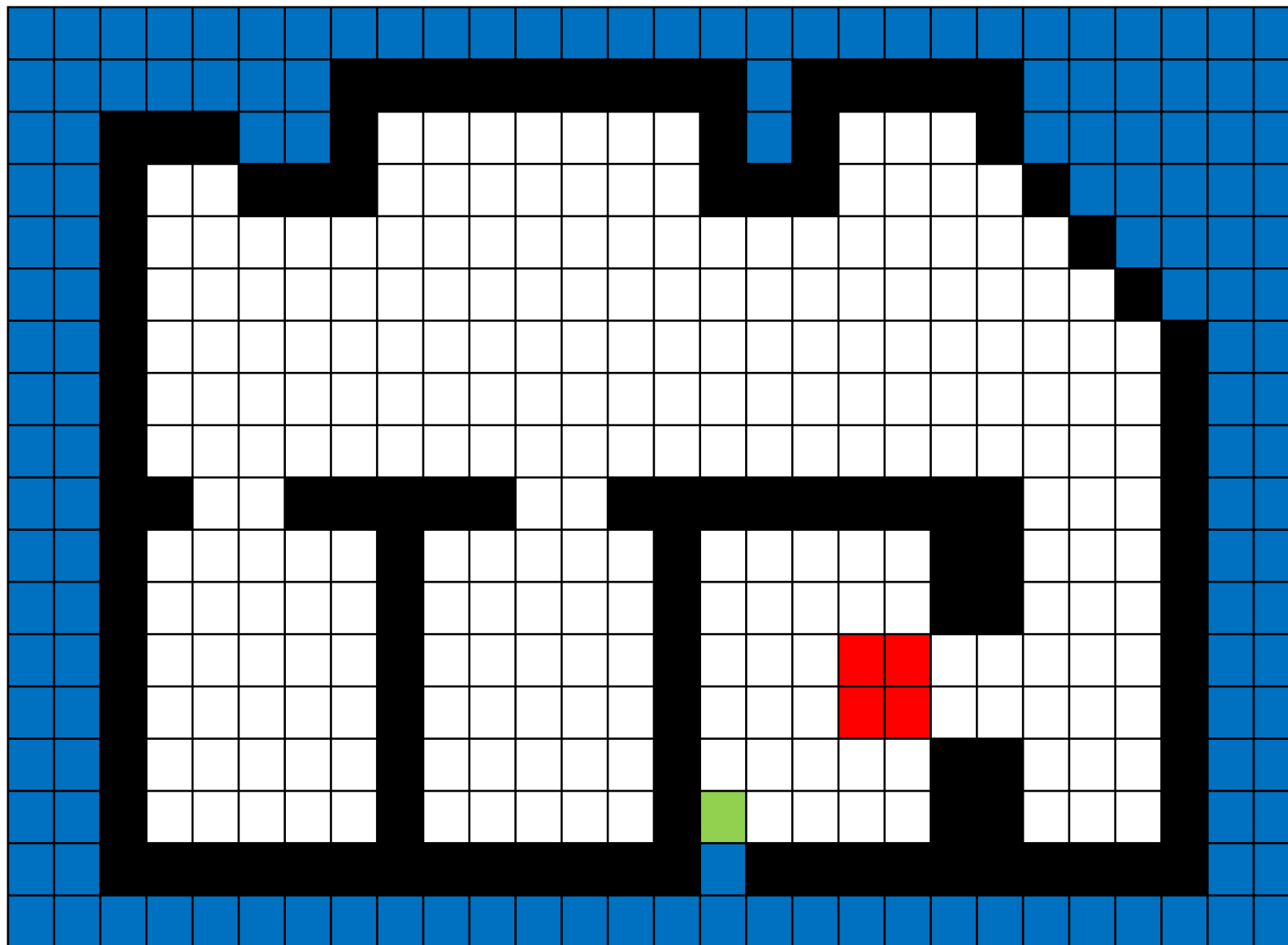
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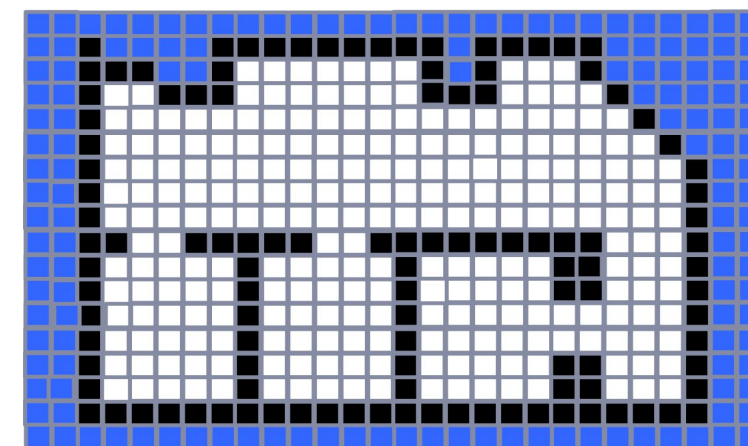
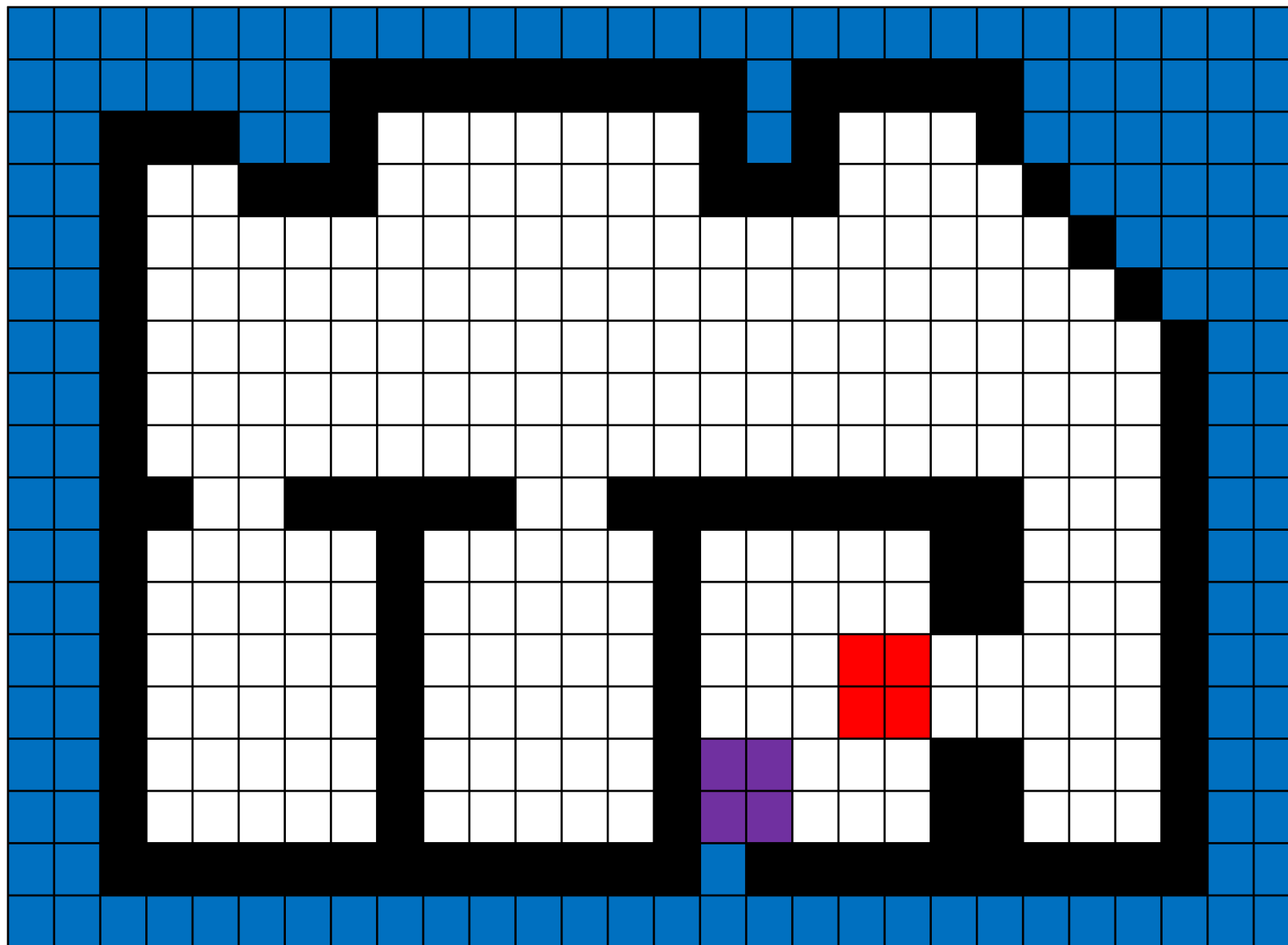
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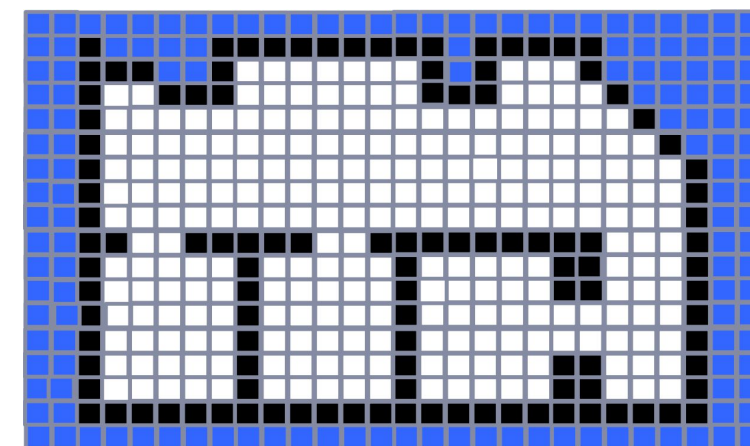
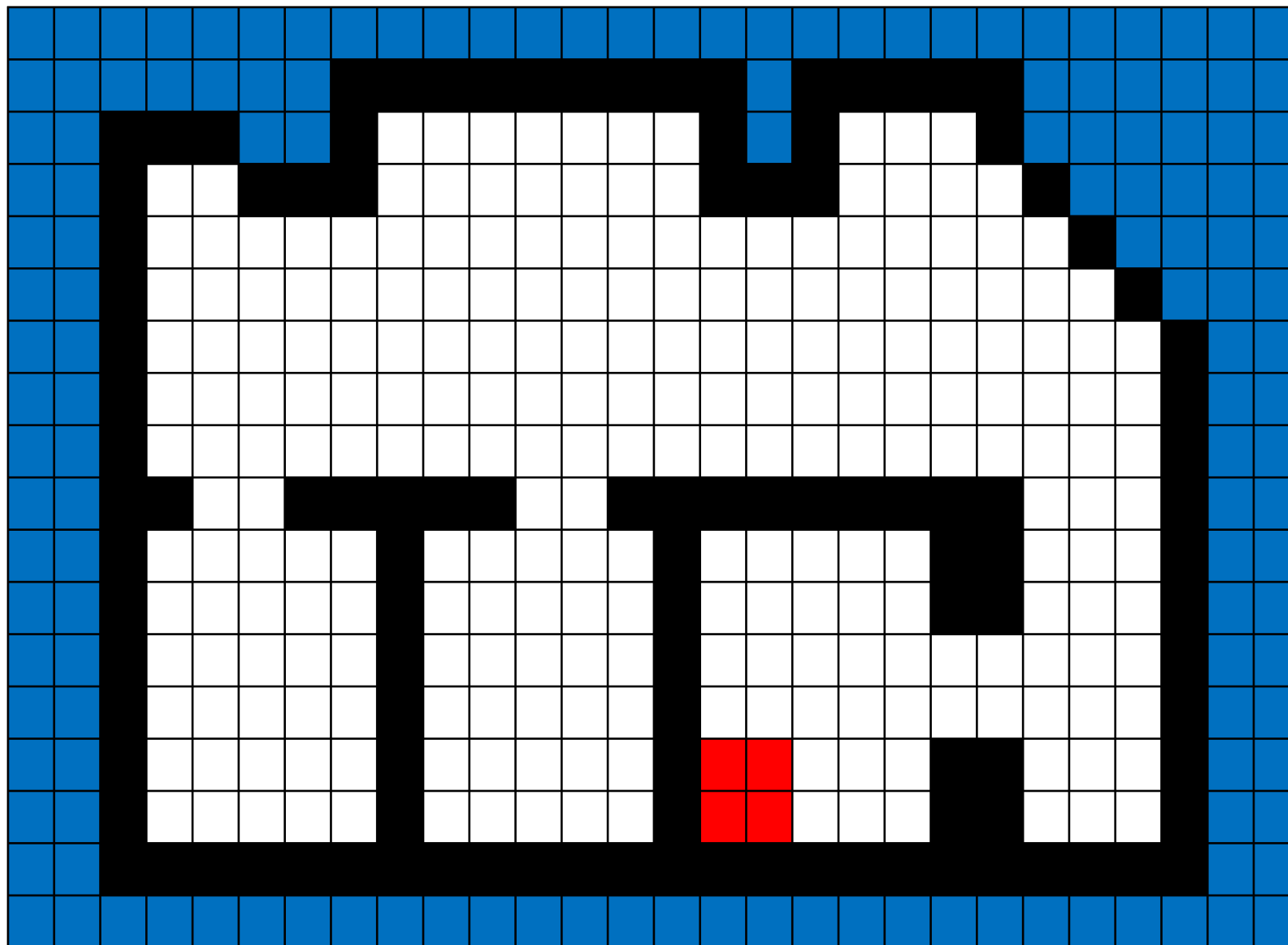
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