



Decision Tree Models

Decision Tree Models

- Overview
- Classification Tree
- Regression Tree
- Feature Importance

Decision Tree: Overview

- Can be used as a classification as well as regression tasks
- Are usually used to create customer segments
- Based on principles of information theory

Decision Tree: Classifier

Existing Customers

Customer	Age	Gender	Marital Status	# cr. Cards	Profitability
1	36	M	M	1	P
2	32	M	S	3	U
3	38	M	M	2	P
4	40	M	S	1	U
5	44	M	M	0	P
6	56	F	M	0	P
7	58	F	S	1	U
8	30	F	S	2	P
9	28	F	M	1	U
10	26	F	M	0	U

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Total Pop = 10
Profitable = 5
Unprofitable = 5
Profitability rate = 50%

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Age > 35



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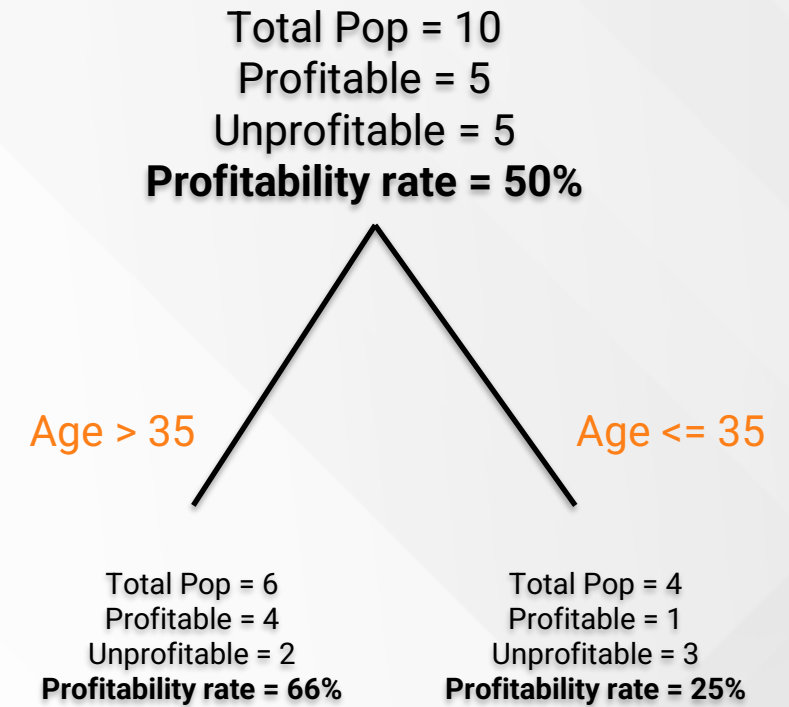
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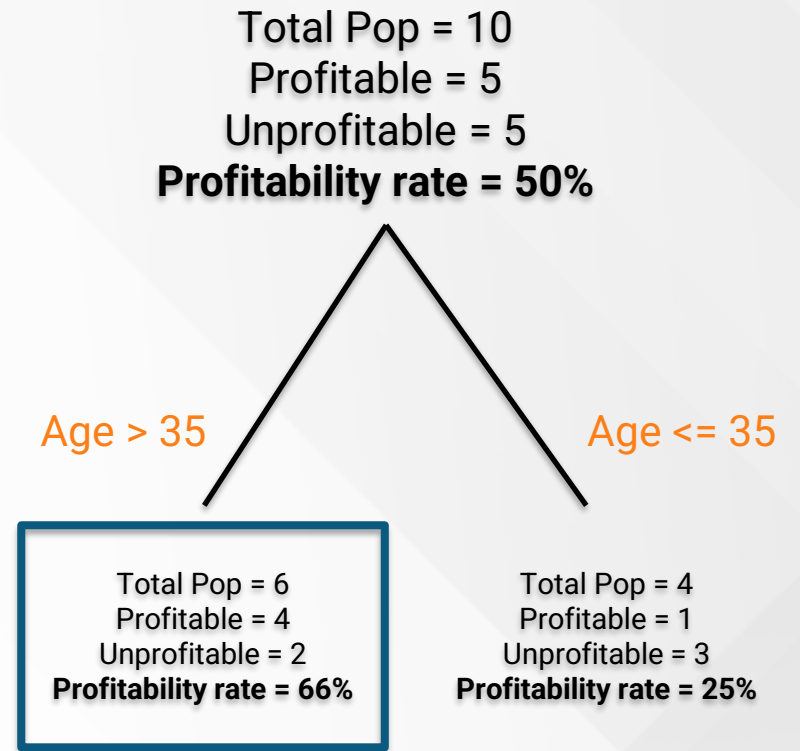
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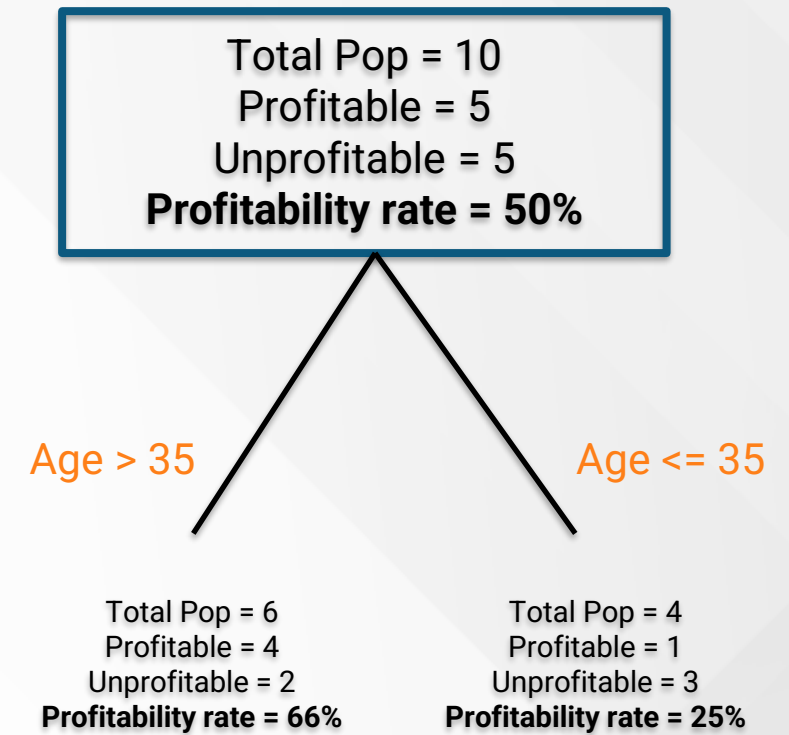
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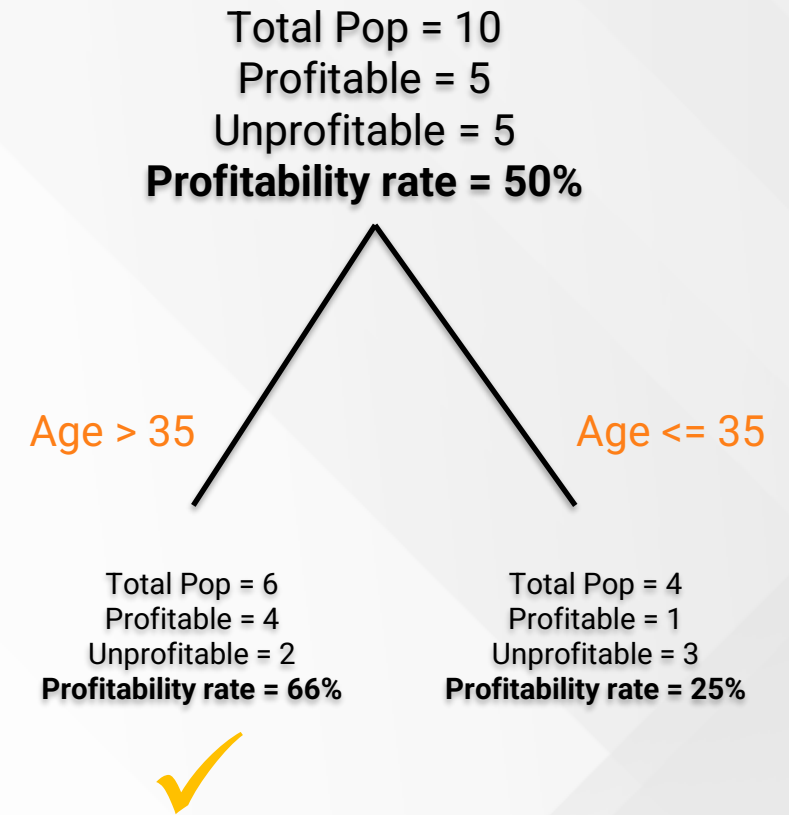
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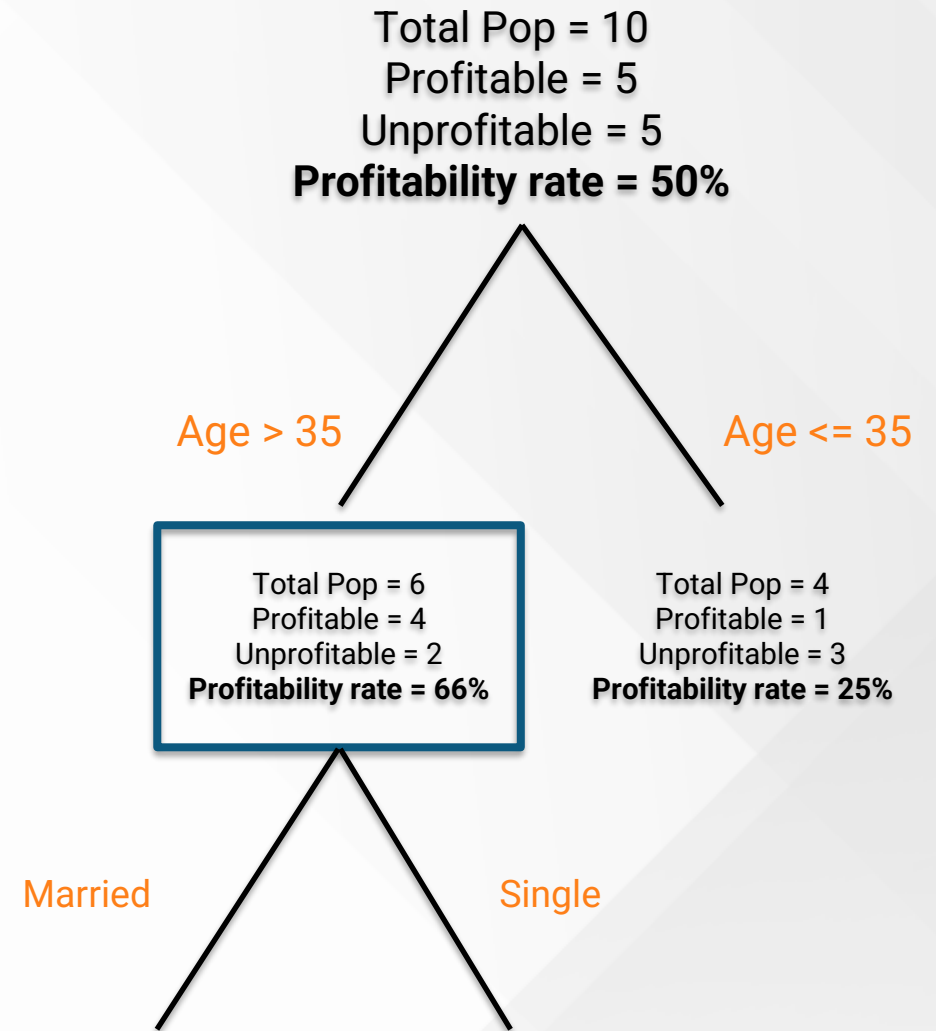
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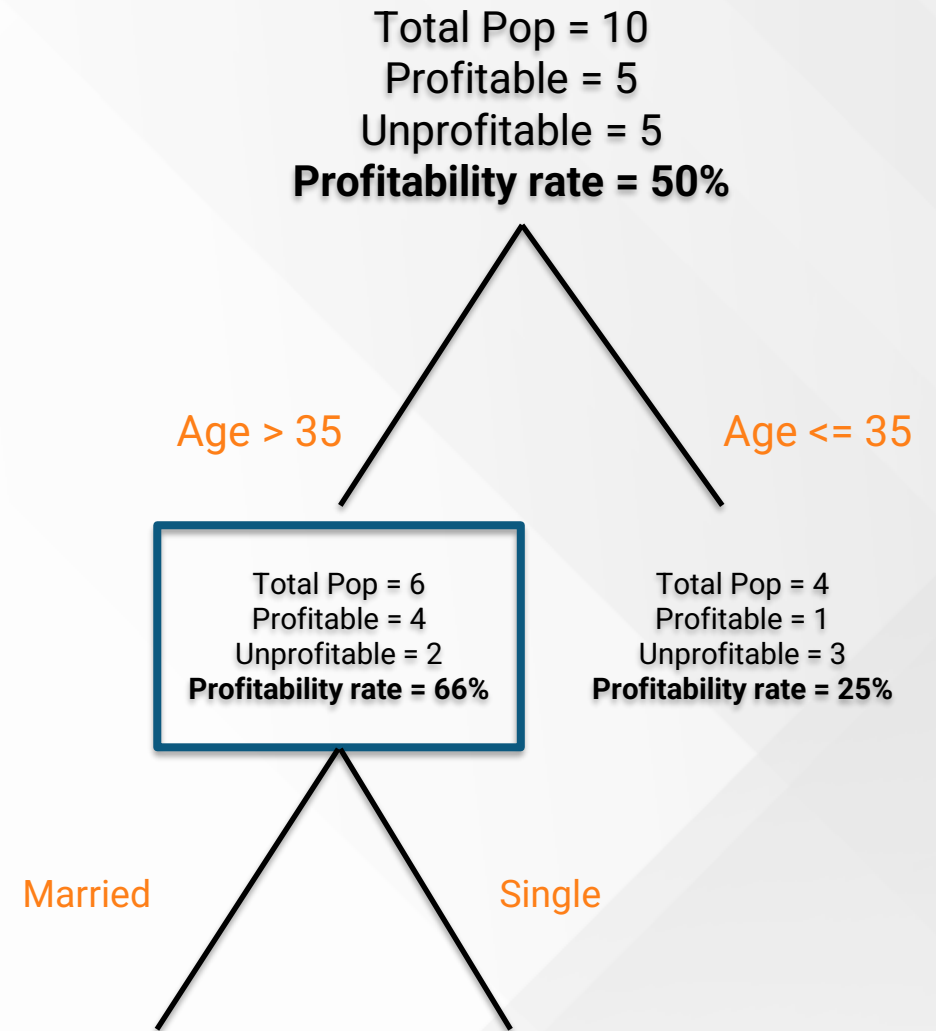


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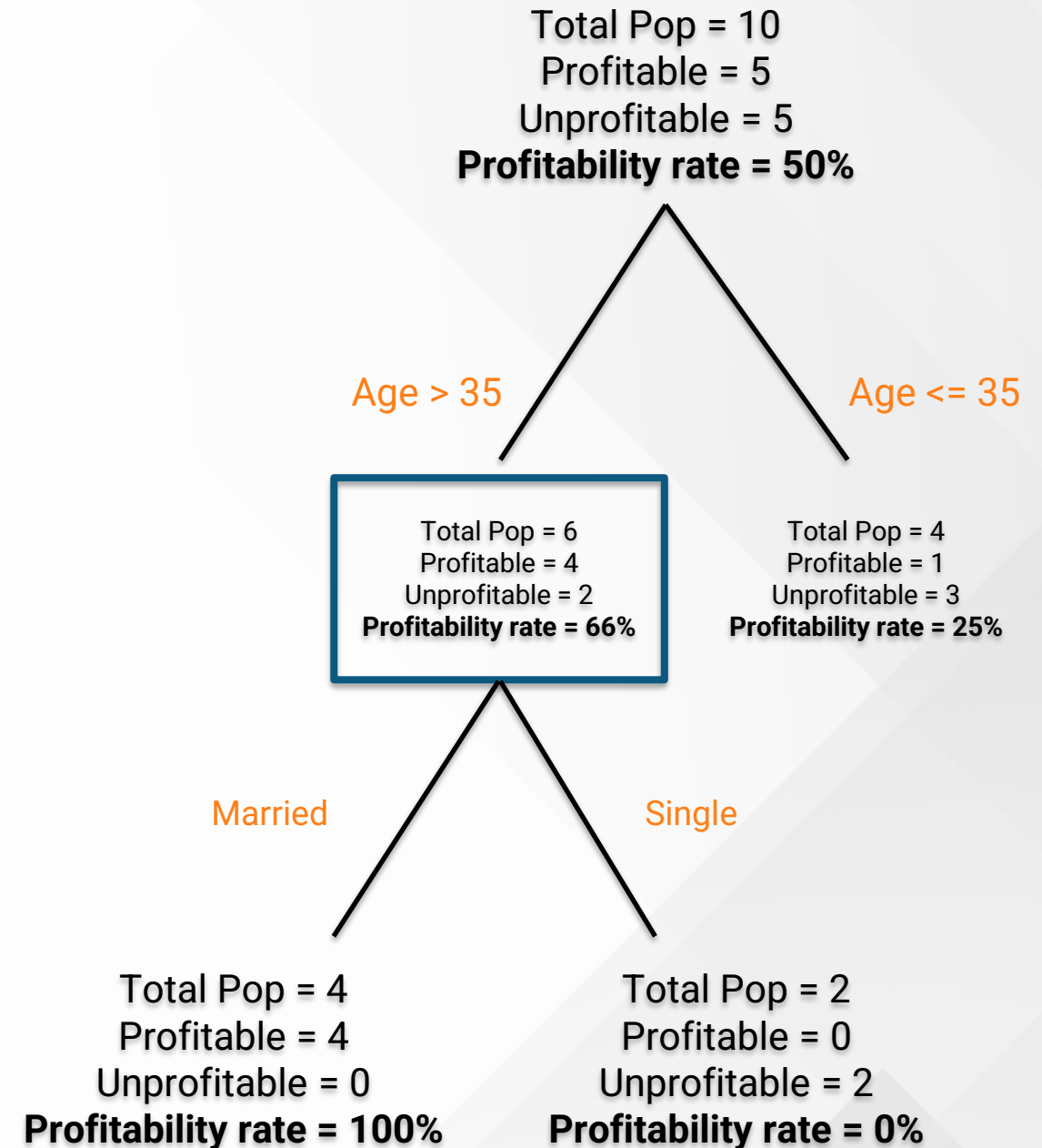
In the Video Question: Find out the profitability rate for the two segments defined by Married and Single categories.



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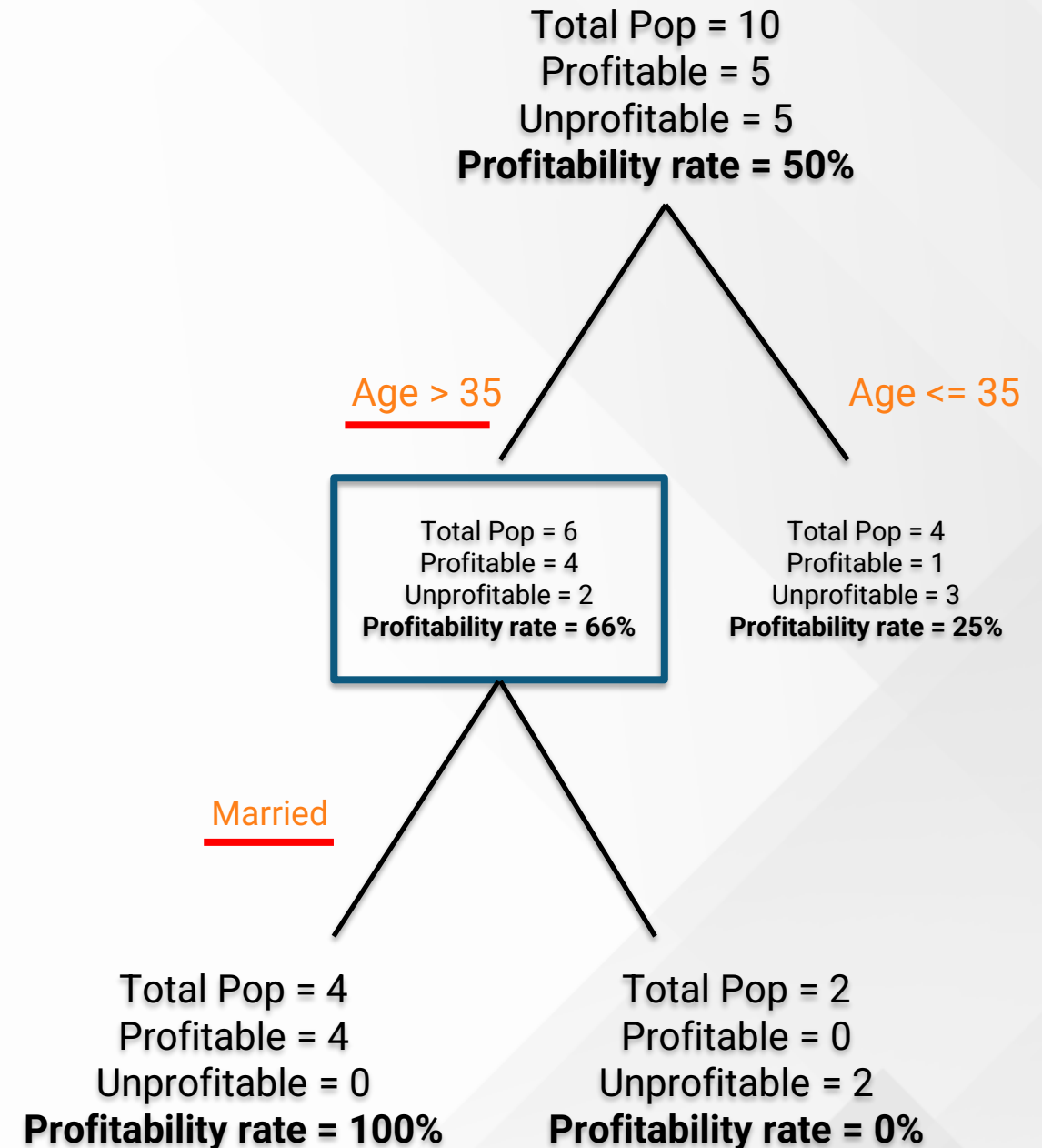
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Thank You!

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