LAB 6 IF STATEMENTS

RAW DATA

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| 101 | Product A | 120 | 150 | North |
| 102 | Product B | 150 | 140 | South |
| 103 | Product C | 200 | 200 | East |
| 104 | Product D | 90 | 100 | West |
| 105 | Product E | 220 | 210 | North |
| 106 | Product F | 130 | 160 | South |

QUESTIONS

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| **Questions** |
| 1. Use the IF function to evaluate whether each product met its sales target. |
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| 2. Use the IF function to determine if a product is eligible for a regional bonus. Products in the 'North' region with sales over 200 are eligible. |
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| 3. Use nested IF functions to assign a commission rate based on sales. Sales >= 200 get a 10% commission, sales >= 150 get a 7% commission, and others get a 5% commission. |
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| 4. Use the IF function to calculate a bonus amount. If sales met or exceeded the target, the bonus is 10% of the sales; otherwise, it's 5%. |
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| 5. Use the IF function to categorize sales performance as 'Excellent' (>=200), 'Good' (>=150), or 'Needs Improvement' (<150). |
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| 6. Use the IF function to assign a price tier based on the sales value. 'High' for sales > 200, 'Medium' for sales between 100 and 200, and 'Low' for sales < 100. |
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| 7. Use the IF function to calculate the year-end bonus. If sales >= 150 and region is 'North', the bonus is $500, otherwise, it's $300. |
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| 8. Use the IF function to mark high performers. A product is a high performer if its sales are in the top 25% of all sales. |

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| 1. Use the IF function to evaluate whether each product met its sales target. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Target** | **Met Sales Target** |  |
| 101 | Product A | North | 120 | 150 | Target Not Met |  |
| 102 | Product B | South | 150 | 140 | Target Met |  |
| 103 | Product C | East | 200 | 200 | Target Met |  |
| 104 | Product D | West | 90 | 100 | Target Not Met |  |
| 105 | Product E | North | 220 | 210 | Target Met |  |
| 106 | Product F | South | 130 | 160 | Target Not Met |  |
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| 2. Use the IF function to determine if a product is eligible for a regional bonus. Products in the 'North' region with sales over 200 are eligible. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Target** | **Eligible/Not Eligible** |  |
| 101 | Product A | North | 120 | 150 | Not Eligible |  |
| 102 | Product B | South | 150 | 140 | Not Eligible |  |
| 103 | Product C | East | 200 | 200 | Not Eligible |  |
| 104 | Product D | West | 90 | 100 | Not Eligible |  |
| 105 | Product E | North | 220 | 210 | Eligible |  |
| 106 | Product F | South | 130 | 160 | Not Eligible |  |
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| 3. Use nested IF functions to assign a commission rate based on sales. Sales >= 200 get a 10% commission, sales >= 150 get a 7% commission, and others get a 5% commission. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Commission** |  |  |
| 101 | Product A | North | 120 | 6 |  |  |
| 102 | Product B | South | 150 | 10.5 |  |  |
| 103 | Product C | East | 200 | 20 |  |  |
| 104 | Product D | West | 90 | 4.5 |  |  |
| 105 | Product E | North | 220 | 22 |  |  |
| 106 | Product F | South | 130 | 6.5 |  |  |
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| 4. Use the IF function to calculate a bonus amount. If sales met or exceeded the target, the bonus is 10% of the sales; otherwise, it's 5%. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Target** | **Bonus** |  |
| 101 | Product A | North | 120 | 150 | 6 |  |
| 102 | Product B | South | 150 | 140 | 15 |  |
| 103 | Product C | East | 200 | 200 | 20 |  |
| 104 | Product D | West | 90 | 100 | 4.5 |  |
| 105 | Product E | North | 220 | 210 | 22 |  |
| 106 | Product F | South | 130 | 160 | 6.5 |  |
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| 5. Use the IF function to categorize sales performance as 'Excellent' (>=200), 'Good' (>=150), or 'Needs Improvement' (<150). | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Performance** |  |  |
| 101 | Product A | North | 120 | Need Improvement |  |  |
| 102 | Product B | South | 150 | Good |  |  |
| 103 | Product C | East | 200 | Excellent |  |  |
| 104 | Product D | West | 90 | Need Improvement |  |  |
| 105 | Product E | North | 220 | Excellent |  |  |
| 106 | Product F | South | 130 | Need Improvement |  |  |
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| 6. Use the IF function to assign a price tier based on the sales value. 'High' for sales > 200, 'Medium' for sales between 100 and 200, and 'Low' for sales < 100. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Tier** |  |  |
| 101 | Product A | North | 120 | Medium |  |  |
| 102 | Product B | South | 150 | Medium |  |  |
| 103 | Product C | East | 200 | Medium |  |  |
| 104 | Product D | West | 90 | Low |  |  |
| 105 | Product E | North | 220 | High |  |  |
| 106 | Product F | South | 130 | Medium |  |  |
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| 7. Use the IF function to calculate the year-end bonus. If sales >= 150 and region is 'North', the bonus is $500, otherwise, it's $300. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Year-End Bonus** |  |  |
| 101 | Product A | North | 120 | $300.00 |  |  |
| 102 | Product B | South | 150 | $300.00 |  |  |
| 103 | Product C | East | 200 | $300.00 |  |  |
| 104 | Product D | West | 90 | $300.00 |  |  |
| 105 | Product E | North | 220 | $500.00 |  |  |
| 106 | Product F | South | 130 | $300.00 |  |  |
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| 8. Use the IF function to mark high performers. A product is a high performer if its sales are in the top 25% of all sales. | | | | | |  |
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| **ProductID** | **Product** | **Region** | **Sales** | **Target** | **Percentile** | **Hight Performers** |
| 101 | Product A | North | 120 | 150 | 187.5 | No |
| 102 | Product B | South | 150 | 140 | 187.5 | No |
| 103 | Product C | East | 200 | 200 | 187.5 | Yes |
| 104 | Product D | West | 90 | 100 | 187.5 | No |
| 105 | Product E | North | 220 | 210 | 187.5 | Yes |
| 106 | Product F | South | 130 | 160 | 187.5 | No |