| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red winter 70 <br> white  spring |

Do you need "group by" for the query "List each ' $E$ ', and its ' $A$ 's that have ' $C^{\prime}<5$ ?"

```
        True
| False
```

Comment: (given as feedback)

Hint:

[^0]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "Group by" for the query "List each ' $D^{\prime}$ state, along with its minimum ' $\mathrm{B}^{\prime}$ (in each state)?"
$\Rightarrow$ - True
False

Comment: (given as feedback)

Hint:

[^1]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "Group by" for the query "List each ' $D$ ' whose average of ' $B$ ' is larger than 10 ?"
$\Rightarrow$ © True
False

Comment: (given as feedback)

Hint:

[^2]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "Group by" for the query "List each ' $D$ ' and its ' $B^{\prime}$ that is larger than 10 ?"

```
    OTrue
=> False
```

Comment: (given as feedback)

Hint:

[^3]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Will table "TA" be enough to solve the query "List each ' $\mathrm{E}^{\prime}$, and its ' $\mathrm{A}^{\prime}$ 's that have ' $\mathrm{C}^{\prime}<5$ ?"
$\Rightarrow$ - True
False

Comment: (given as feedback)

Hint:

[^4]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Will table "TA" be enough to solve the query "List each ' $E^{\prime}$, and its ' $A$ 's that have ' $Y$ ' $<65$ ?"True
$\Rightarrow$ False

Comment: (given as feedback)

Hint:

[^5]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

For the query "List each ' $E$ ', and its ' $A$ 's that have ' $Y^{\prime}<65$," is it true that the table name ('TA' or 'TB') can be omitted for EACH attribute that is in the "select" statement/line?

```True
\(\Rightarrow\) False
```


## Comment: (given as feedback)

- No comment specified.

Hint:

- No hint specified.

| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br> white  spring |

For the query "List each ' $E^{\prime}$ ', and its 'A's that have ' $C^{\prime}<5$," is it true that the table name ('TA' or 'TB') can be omitted for EACH attribute that is in the "select" statement/line?
$\Rightarrow$ - True
False

Comment: (given as feedback)

- No comment specified.

Hint:

- No hint specified.

| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "Where" for the query "List each ' $E^{\prime}$ ', and its 'A's that have ' $C^{\prime}<5$ ?"
$\Rightarrow$ © True
False

Comment: (given as feedback)

Hint:

[^6]| TA |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "where" for the query "List each ' $D$ ' state, along with its minimum ' $B$ ' (in each state)?"

```
        OTrue
\(\Rightarrow\) ( False
```

Comment: (given as feedback)

Hint:

[^7]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "where" for the query "List each ' $D$ ' whose average of ' $B$ ' is larger than 10 ?"

```
    OTrue
| False
```

Comment: (given as feedback)

Hint:

[^8]| TA |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |  |  |
| :--- | :--- | ---: |
| $\mathbf{Z}$ | $\mathbf{X}$ | C |
| Blue | summer | 10 |
| green | fall | 4 |
| Red | winter | 10 |
| white | spring | 6 |

Do you need "where" for the query "List each 'Z', and its relevant 'A's?"
$\Rightarrow$ - True
False

Comment: (given as feedback)

Hint:

[^9]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "having" for the query "List each ' $E$ ', and its ' $A$ 's that have ' $C^{\prime}<5$ ?"

```
        OTrue
\(\Rightarrow\) False
```

Comment: (given as feedback)

Hint:

[^10]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red winter 70 <br> white  spring |

Do you need "having" for the query "List each ' $D$ ' state, along with its minimum ' $\mathrm{B}^{\prime}$ (in each state)?"

```
        True
* False
```

Comment: (given as feedback)

Hint:

[^11]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "having" for the query "List each ' $D$ ' whose average of ' $B$ ' is larger than 10 ?"
$\Rightarrow$ © True
False

Comment: (given as feedback)

Hint:

[^12]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |  |  |
| :--- | :--- | ---: |
| $\mathbf{Z}$ | $\mathbf{X}$ | C |
| Blue | summer | 10 |
| green | fall | 4 |
| Red | winter | 10 |
| white | spring | 6 |

Do you need "having" for the query "List each 'Z', and its relevant 'A's?"

```
        OTrue
\(\Rightarrow\) (०) False
```

Comment: (given as feedback)

Hint:

[^13]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "group by" for the query "List each 'D' that has at least one record of ' $C$ '>5?"
$\Rightarrow$ © True
False

Comment: (given as feedback)

Hint:

[^14]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "where" for the query "List each ' $D$ ' that has at least one record of ' $C$ '>5?"
$\Rightarrow$ - True
False

Comment: (given as feedback)

Hint:

[^15]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "having" for the query "List each ' $D$ ' that has at least one record of ' $C$ ' $>5$ ?"
$\Rightarrow$ © True
False

Comment: (given as feedback)

Hint:

[^16]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "nested SQL" for the query "List each 'D' that has at least one record of ' $C^{\prime}>5$ ?"

```
        True
\(\Rightarrow\) (०) False
```

Comment: (given as feedback)

Hint:

[^17]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

Do you need "Nested SQL" for the query "List each ' $\mathrm{D}^{\prime}$ ', where its count of ' A ' exceeds the average?"
$\Rightarrow$ © True
False

Comment: (given as feedback)

Hint:

[^18]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

For the query "List each ' $E$ ', and its ' $A$ 's that have ' $Y$ ' $<65$ " from the attached tables, which attribute is used as the multipletable connector to avoid display redundancy? $\qquad$ (E)

Comment: (given as feedback)

- No comment specified.

Hint:

- No hint specified.

| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |  |  |
| :--- | :--- | ---: |
| $\mathbf{Z}$ | $\mathbf{X}$ | C |
| Blue | summer | 10 |
| green | fall | 4 |
| Red | winter | 10 |
| white | spring | 6 |

For the query "List each ' $Z$ ', and its ' $A$ 's that have ' $B$ ' $>5$ " from the attached tables, which attribute is used as the multiple-table connector to avoid display redundancy? $\qquad$ (C)

Comment: (given as feedback)

- No comment specified.

Hint:

- No hint specified.

| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

SELECT $E, \max (B) A S[H i g h], \min (B) A S[L o w], \operatorname{count}(A) A S$ [count]

FROM TA

WHERE $\mathrm{c}=4$

GROUP BY E

HAVING count $(A)>1$;

How many groups do you have after 'group by' but before 'having' is executed?" $\qquad$ (3)

Comment: (given as feedback)

Hint:

[^19]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |



SELECT $E, \max (B) A S[H i g h], \min (B) A S[L o w], \operatorname{count}(A) A S$ [count]

FROM TA

WHERE $\mathrm{c}=4$

GROUP BY E

HAVING count $(A)>1$;

How many 'A' records in GROUP 'red' does the original table have before the query is executed? $\qquad$ (4)

Comment: (given as feedback)

Hint:

[^20]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

SELECT $E, \max (B) A S[H i g h], \min (B) A S[L o w], \operatorname{count}(A) A S$ [count]

FROM TA

WHERE $\mathrm{c}=4$

GROUP BY E

HAVING count $(A)>1$;

How many 'A' records do you have in GROUP 'red' that is selected in the final as the result for display? $\qquad$ (2)

Comment: (given as feedback)

Hint:

[^21]| TA |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | E |
| 4 | 8 | 10 | PA | red |
| 6 | 7 | 4 | DE | red |
| 8 | 6 | 10 | NJ | red |
| 10 | 18 | 4 | NJ | red |
| 12 | 15 | 4 | NJ | blue |
| 14 | 5 | 10 | PA | blue |
| 16 | 4 | 10 | PA | white |
| 18 | 11 | 4 | PA | white |
| 20 | 13 | 4 | DE | blue |
| 22 | 17 | 10 | PA | blue |
| 24 | 8 | 4 | NJ | blue |


| TB |
| :--- |
| $\mathbf{E}$ $\mathbf{X}$ $\mathbf{Y}$ <br> Blue summer 50 <br> green  fall <br> Red  winter <br>   70 <br> white  spring |

SELECT $E, \max (B) A S[H i g h], \min (B) A S[L o w], \operatorname{count}(A) A S$ [count]
FROM TA

WHERE $\mathrm{c}=4$

GROUP BY E
having count $(A)>1$;

How many GROUPs are selected as the result for display at the end? $\qquad$ (2)

Comment: (given as feedback)

Hint:

[^22]
[^0]:    - No hint specified.

[^1]:    - No hint specified.

[^2]:    - No hint specified.

[^3]:    - No hint specified.

[^4]:    - No hint specified.

[^5]:    - No hint specified.

[^6]:    - No hint specified.

[^7]:    - No hint specified.

[^8]:    - No hint specified.

[^9]:    - No hint specified.

[^10]:    - No hint specified.

[^11]:    - No hint specified.

[^12]:    - No hint specified.

[^13]:    - No hint specified.

[^14]:    - No hint specified.

[^15]:    - No hint specified.

[^16]:    - No hint specified.

[^17]:    - No hint specified.

[^18]:    - No hint specified.

[^19]:    - No hint specified. -

[^20]:    - No hint specified. -

[^21]:    - No hint specified. -

[^22]:    - No hint specified. -

