Consider three relations:

• Book(Isbn, BookTitle, Format, Publisher, PubDate),
• Author(AuthorID, AuthorName, AuthorBirthDate),
• WrittenBy(Isbn, AuthorID)

Select all (and only) left-deep trees that represent a relational algebra query that returns all (and only) the BookTitle and AuthorName of all books published by 'VUPress'.

As you select your choices, A1-A5, be careful to associate the choice with the corresponding tree, which will be the tree that appears immediately below the choice (not above the choice).

The correct answers are A1, A3, A4

A2 is not a left-deep tree

A5 is left-deep, but it does not represent an RA query that accurately answers the query specification

See the trees on the following pages
\[ \pi_{\text{BookTitle}, \text{AuthorName}} \]

\[ \sigma_{\text{Publisher}='\text{VUPress}'} \]

\[ \text{Book} \]

\[ \text{WrittenBy} \]

\[ \text{Author} \]
\[ \pi_{\text{BookTitle}, \text{AuthorName}} \sigma_{\text{Publisher}=\text{VUPress}} \]

- Book
- WrittenBy
- Author
\[ \pi_{\text{BookTitle, AuthorName}} \]
\[ \sigma_{\text{Publisher='VUPress'}} \]

\[ \pi_{\text{AuthorID, AuthorName}} \]
\[ \text{WrittenBy} \]

\[ \text{Book} \]

\[ \text{Author} \]
\[ \pi_{\text{BookTitle}, \text{AuthorName}} \]

\[ \sigma_{\text{Publisher}='VUPress'} \]

\[ \text{WrittenBy} \]

\[ \text{Book} \]

\[ \text{Author} \]