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COS 454/554 Fall 2O22 Class Exercise 1 3 questions; 2 pgs. 2022-09-28
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1. Write your name below:
2. Depict tables similar to those in Figure 14.5 (page 380) of the textbook for Matrix-Chain-Order (page 378) on the following input:

| matrix: | $A_{1}$ | $A_{2}$ | $A_{3}$ | $A_{4}$ | $A_{5}$ |
| ---: | :---: | :---: | :---: | :---: | :---: |
| dimension: | $100 \times 30$ | $30 \times 100$ | $100 \times 30$ | $30 \times 70$ | $70 \times 10$ |

3. Trace the action of the textbook's Print-Optimal-Parens (page 381) on the instance of Question 2. Depict the tree of recursive calls and their arguments. Write down the final parenthesization in the conventional format.
