



- **Assign Level Numbers**

$$L1 = \{a2, a4\} \quad L2 = \{a3, a5\}$$

- **Permute activities in the levels**

$$L1 = \left\{ \begin{matrix} a2-a4, \\ a4-a2 \end{matrix} \right\} \quad L2 = \left\{ \begin{matrix} a3-a5, \\ a5-a3 \end{matrix} \right\}$$

- **Concatenate lists of all levels**

$$CTS = \left\{ \begin{matrix} a2-a4-a3-a5 \\ a4-a2-a3-a5 \\ a2-a4-a5-a3 \\ a4-a2-a5-a3 \end{matrix} \right\}$$

- **Generate DFS paths**

1. S-a1-F- a2-a3-J-a6-E
2. S-a1-F- a4-a5-J-a6-E

- **Append DFS Prefix and Suffix**

**Prefix:**S-a1-F-    **Suffix:**-J-a6-E

1. S-a1-F- a2-a4-a3-a5-J-a6-E

...

4. S-a1-F- a4-a2-a5-a3-J-a6-E