





$$A = \min_{a,d,g} \left(B\left[a,d | d,g \right] \right)$$

$$B'\left[a,d | d',g \right] = \min \begin{cases} B'\left[a,d-1 | d',g \right], & \text{if } d-1,\notin \{a,d',g\} \\ B\left[a+1,d-1 | d',g \right] + \Delta G(a,d) & \text{if } \{a+1,d-1\} \cap \{d',g\} = \emptyset \end{cases}$$

$$B\left[a,d | d',g \right] = \min \begin{cases} B\left[a+1,d | d',g \right], & \text{if } a+1\notin \{d,d',g\} \\ B'\left[a,d-1 | d',g \right], & \text{if } d-1,\notin \{a,d',g\} \\ B\left[a+1,d-1 | d',g \right] + \Delta G(a,d) & \text{if } \{a+1,d-1\} \cap \{d',g\} = \emptyset, \end{cases}$$

$$C'\left[d,g | b,c \right] = \min \begin{cases} C'\left[d,g-1 | b,c \right], & \text{if } g-1,\notin \{d,b,c\} \\ C\left[d+1,g-1 | b,c \right] + \Delta G(d,g) & \text{if } \{d+1,g-1\} \cap \{b,c\} = \emptyset \end{cases}$$

$$C\left[d,g | b,c \right] = \min \begin{cases} C\left[d+1,g | b,c \right], & \text{if } g-1,\notin \{d,b,c\} \\ C'\left[d,g-1 | b,c \right], & \text{if } g-1,\notin \{d,b,c\} \\ C'\left[d+1,g-1 | b,c \right] + \Delta G(d,g) & \text{if } \{d+1,g-1\} \cap \{b,c\} = \emptyset, \end{cases}$$

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$$C'\left[d,g | b,c \right] = \min \begin{cases} C\left[d+1,g| b,c \right], & \text{if } g-1,\notin \{d,b,c\} \\ C'\left[d+1,g-1 | b,c \right] + \Delta G(d,g) & \text{if } \{d+1,g-1\} \cap \{b,c\} = \emptyset, \end{cases}$$