



标签维护

$L[0] = \{0, 0, 0, \infty\}$   
 $L[1] = \{0, 3, 0, \infty\}, \{1, 0, 0, \infty\}$   
 $L[2] = \{0, 6, 2, \infty\}, \{1, 3, 2, \infty\}, \{2, 0, 0, \infty\}, \{0, 4, 1, 1\}, \{1, 1, 1, 1\}, \{0, 6, 0, 0\}, \{1, 4, 0, 0\}$   
 $L[3] = \{0, 5, 0, \infty\}, \{1, 2, 0, \infty\}, \{2, 5, 2, \infty\}, \{3, 0, 0, \infty\}$   
 $L[4] = \{0, 7, 2, \infty\}, \{1, 4, 2, \infty\}, \{2, 3, 0, \infty\}, \{3, 2, 2, \infty\}, \{4, 0, 0, \infty\},$   
 $\{0, 6, 1, 1\}, \{1, 3, 1, 1\}, \{3, 1, 1, 1\}, \{0, 8, 0, 0\}, \{1, 5, 0, 0\}, \{3, 3, 0, 0\}$   
 $L[5] = \{0, 7, 2, \infty\}, \{1, 4, 2, \infty\}, \{2, 1, 0, \infty\}, \{3, 4, 2, \infty\}, \{4, 2, 0, \infty\}, \{5, 0, 0, \infty\}$   
 $\{0, 5, 1, 1\}, \{1, 2, 1, 1\}, \{3, 3, 1, 1\}, \{0, 7, 0, 0\}, \{1, 5, 0, 0\}, \{3, 5, 0, 0\}$   
 $L[6] = \{0, 8, 2, \infty\}, \{1, 5, 2, \infty\}, \{2, 2, 0, \infty\}, \{3, 3, 2, \infty\}, \{4, 1, 0, \infty\}, \{5, 1, 0, \infty\}, \{6, 0, 0, \infty\},$   
 $\{0, 6, 1, 1\}, \{1, 3, 1, 1\}, \{3, 2, 1, 1\}, \{0, 8, 0, 0\}, \{1, 6, 0, 0\}, \{3, 4, 0, 0\}$   
 $L[7] = \{0, 6, 0, \infty\}, \{7, 0, 0, \infty\}$

1<sup>st</sup> 维护  $AL_1$

$(v_2, v_0, 4), (v_2, v_1, 1)$   
 $(v_4, v_0, 6), (v_4, v_1, 3)$   
 $(v_4, v_3, 1)$

2<sup>st</sup> 维护  $AL_1$

$(v_5, v_0, 5), (v_5, v_1, 2),$   
 $(v_6, v_3, 2)$

3<sup>st</sup> 维护  $AL_1$

$(v_2, v_0, 6), (v_6, v_0, 6)$   
 $(v_2, v_1, 3), (v_6, v_1, 3)$   
 $(v_5, v_3, 3)$

4<sup>st</sup> 维护  $AL_1$

$(v_5, v_0, 7), (v_4, v_0, 7)$   
 $(v_5, v_1, 4), (v_5, v_1, 4)$

5<sup>st</sup> 维护  $AL_1$

$(v_6, v_0, 8), (v_6, v_1, 5)$

6<sup>st</sup> 维护  $AL_1$

$(v_6, v_0), (v_6, v_1)$

2<sup>st</sup> 维护  $AL_2$

$(v_2, v_0), (v_3, v_2)$   
 $(v_2, v_1), (v_4, v_0)$   
 $(v_4, v_1), (v_4, v_3)$

3<sup>st</sup> 维护  $AL_2$

$(v_5, v_0), (v_5, v_1)$   
 $(v_6, v_3)$

4<sup>st</sup> 维护  $AL_2$

$(v_2, v_0), (v_2, v_1)$   
 $(v_6, v_0), (v_6, v_1)$   
 $(v_5, v_3)$

5<sup>st</sup> 维护  $AL_2$

$(v_5, v_0), (v_5, v_1)$   
 $(v_4, v_0), (v_4, v_0)$

受影响标签

1<sup>st</sup> 标签更新

$(v_2, v_0, 6), (v_2, v_1, 3)$   
 $(v_3, v_2, 5), (v_4, v_0, 7)$   
 $(v_4, v_1, 4), (v_4, v_3, 2)$

2<sup>st</sup> 标签更新

$(v_5, v_0, 7), (v_5, v_1, 4)$   
 $(v_6, v_3, 3)$

3<sup>st</sup> 标签更新

$(v_2, v_0, 6), (v_6, v_0, 8)$   
 $(v_2, v_1, 3), (v_6, v_1, 5)$   
 $(v_5, v_3, 4)$

4<sup>st</sup> 标签更新

$(v_5, v_0, 7), (v_4, v_0, 7)$   
 $(v_5, v_1, 4), (v_4, v_1, 4)$

5<sup>st</sup> 标签更新

$(v_6, v_0, 8), (v_6, v_1, 5)$

标签更新