

## Cycle 3 Part A Test Cases

Q1:

Case No	Input	Output
1	5 1 2 2 1 3 4 4 3 5 5 4 n s b a t	2 2 3 3 1
2	8 1 2 2 1 3 3 2 4 4 3 5 6 5 4 6 4 7 7 6 8 8 7 n s b a t	1 8 7 5

<b>3</b>	12 1 2 4 2 1 3 3 2 4 4 1 5 5 4 6 6 5 7 9 7 6 8 8 7 9 10 9 6 8 10 10 9 11 12 11 10 12 12 10 11 n s b a t	1 12 2 4
<b>4</b>	9 1 2 3 4 2 1 3 1 4 5 6 4 1 3 5 3 7 6 3 7 7 5 6 8 9 9 8 n s b a t	2 2 7 2 2

<b>5</b>	6 1 2 3 2 1 3 3 1 2 4 5 6 4 3 6 5 3 6 6 3 4 5 n s b a t	1 6 -1 1
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**Q2:**

<b>Case No.</b>	<b>Input</b>	<b>Output</b>
1	6 0 1 0 0 0 0 0 0 1 0 0 0 1 0 0 1 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0 0 0 1 0 t c x	-1 2

2	<div>9</div> <div>011000000</div> <div>001000000</div> <div>000100000</div> <div>000010000</div> <div>000001000</div> <div>000000000</div> <div>001100000</div> <div>000110000</div> <div>000011000</div> <div>t</div> <div>c</div> <div>x</div>	<div>1</div> <div>9</div>
3	<div>7</div> <div>0100000</div> <div>0010000</div> <div>0001011</div> <div>0000100</div> <div>0100000</div> <div>0000001</div> <div>0000010</div> <div>t</div> <div>c</div> <div>x</div>	<div>-1</div> <div>3</div>
4	<div>9</div> <div>011100001</div> <div>000111000</div> <div>000000111</div> <div>000000000</div> <div>000100000</div> <div>000010000</div> <div>000000000</div> <div>000000100</div> <div>000000010</div> <div>t</div> <div>c</div> <div>x</div>	<div>1</div> <div>9</div>

5	6 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0 1 1 0 0 0 1 0 0 0 1 0 0 t c x	-1 2
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**Q3:**

Case No	Input	Output
1	7 0 1 2 3 1 0 2 4 5 6 3 0 4 2 5 2 6 2 a 0 6 t x	0 2 6 1

2	5 0 1 3 4 1 0 2 3 2 1 3 4 3 0 1 2 4 0 2 a 0 3 t x	0 1 2 3 0 1 3 0 3 0 4 2 1 3 0 4 2 3 -1
3	10 0 1 2 3 9 1 0 2 0 4 5 3 0 6 7 4 2 5 2 6 3 8 7 3 8 6 9 9 0 8 t a 0 5 a 0 6 x	-1 0 2 5 0 3 6 0 9 8 6
4	6 0 1 2 1 0 2 2 0 1 3 3 2 4 5 4 3 5 5 3 4 t a 5 1 x	-1 5 3 2 0 1 5 3 2 1 5 4 3 2 0 1 5 4 3 2 1

5	6 0 1 1 0 2 3 4 5 2 1 3 1 4 1 5 1 t a 2 4 a 2 5 a 2 1 a 2 0 x	1 2 1 4 2 1 5 2 1 2 1 0
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