

Take any list of 0's and 1's, e.g. [0, 1, 1, 0, 1, 1, 0, 1, 0, 1]; process the list from left to right, flipping every element whose right and left neighbors are identical. Flipping an item means making it 0 if it's 1, and making it 1 if it's 0. The example list should yield [0, 1, 1, 1, 0, 0, 0, 0, 0, 1].

### Question 2 (40%)

What is the output of the following program:

```
def func(x):  
    x[0] = 8  
    x = [1,2,3]  
    return x
```

```
def funk(x):
    s = x
    x[0] = 7
    s[1] = 6
    return x
```

```
k = [0,0,0]
print(func(k))
print(funk(k))
print(k)
```

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on its right side, suggesting it's resting on a surface.