

Solutions for Section #5

Solution 1: Finding duplicates in arrays

```
def findDuplicate(array):
    for i in range(len(array)):
        elem = array[i]
        if elem in array[i + 1:]: return elem
    return None
```

Solution 2: Reading data structures from files

```
def readEnigmaCodebook(filename):
    codebook = {}
    with open(filename) as inFile:
        lines = inFile.read().splitlines()
        for line in lines:
            columns = line.split(' ')
            date = columns[0]
            order = columns[1]
            setting = columns[2]
            pairings = columns[3:]
            codebook[date] = {
                "rotorOrder": order,
                "rotorSetting": setting,
                "steckerPairing": pairings,
            }
    return codebook
```