In [1]:
```
import csv
```

CSV

Reading

In [2]:
```
with open('10_02_us.csv', 'r') as f:
    reader = csv.reader(f, delimiter='\t')
    for row in reader:
        print(row)
```

```
['country', 'postal code', 'place name', 'state', 'state code', 'county',
'county code', 'latitude', 'longitude', 'accuracy']
['US', '99553', 'Akutan', 'Alaska', 'AK', 'Aleutians East', '013', '54.14
3', '-165.7854', '1']
['US', '99571', 'Cold Bay', 'Alaska', 'AK', 'Aleutians East', '013', '55.18
58', '-162.7211', '1']
['US', '99583', 'False Pass', 'Alaska', 'AK', 'Aleutians East', '013', '54.
8542', '-163.4113', '1']
['US', '99612', 'King Cove', 'Alaska', 'AK', 'Aleutians East', '013', '55.0
628', '-162.3056', '1']
['US', '99661', 'Sand Point', 'Alaska', 'AK', 'Aleutians East', '013', '55.
3192', '-160.4914', '1']
['US', '99546', 'Adak', 'Alaska', 'AK', 'Aleutians West (CA)', '016', '51.8
74', '-176.634', '1']
['US', '99547', 'Atka', 'Alaska', 'AK', 'Aleutians West (CA)', '016', '52.1
961', '-174.2006', '1']
['US', '99591', 'Saint George Island', 'Alaska', 'AK', 'Aleutians West (C
A)', '016', '56.5944', '-169.6186', '1']
['US', '99638', 'Nikolski', 'Alaska', 'AK', 'Aleutians West (CA)', '016',
```

In [3]:
```
with open('10_02_us.csv', 'r') as f:
    reader = csv.reader(f, delimiter='\t')
    next(reader)
    next(reader)
    for row in reader:
        print(row)
```

```
['US', '99571', 'Cold Bay', 'Alaska', 'AK', 'Aleutians East', '013', '55.18
58', '-162.7211', '1']
['US', '99583', 'False Pass', 'Alaska', 'AK', 'Aleutians East', '013', '54.
8542', '-163.4113', '1']
['US', '99612', 'King Cove', 'Alaska', 'AK', 'Aleutians East', '013', '55.0
628', '-162.3056', '1']
['US', '99661', 'Sand Point', 'Alaska', 'AK', 'Aleutians East', '013', '55.
3192', '-160.4914', '1']
['US', '99546', 'Adak', 'Alaska', 'AK', 'Aleutians West (CA)', '016', '51.8
74', '-176.634', '1']
['US', '99547', 'Atka', 'Alaska', 'AK', 'Aleutians West (CA)', '016', '52.1
961', '-174.2006', '1']
['US', '99591', 'Saint George Island', 'Alaska', 'AK', 'Aleutians West (C
A)', '016', '56.5944', '-169.6186', '1']
['US', '99638', 'Nikolski', 'Alaska', 'AK', 'Aleutians West (CA)', '016',
'52.9381', '-168.8678', '1']
['US', '99660', 'Saint Paul Island', 'Alaska', 'AK', 'Aleutians West (CA)',
'016', '57.1842', '-170.2764', '1']
['US', '99685', 'Unalaska', 'Alaska', 'AK', 'Aleutians West (CA)', '016',
```

In [4]:
```
with open('10_02_us.csv', 'r') as f:
    reader = list(csv.reader(f, delimiter='\t'))
    for row in reader[1:]:
        print(row)
```

```
['US', '99553', 'Akutan', 'Alaska', 'AK', 'Aleutians East', '013', '54.14
3', '-165.7854', '1']
['US', '99571', 'Cold Bay', 'Alaska', 'AK', 'Aleutians East', '013', '55.18
58', '-162.7211', '1']
['US', '99583', 'False Pass', 'Alaska', 'AK', 'Aleutians East', '013', '54.
8542', '-163.4113', '1']
['US', '99612', 'King Cove', 'Alaska', 'AK', 'Aleutians East', '013', '55.0
628', '-162.3056', '1']
['US', '99661', 'Sand Point', 'Alaska', 'AK', 'Aleutians East', '013', '55.
3192', '-160.4914', '1']
['US', '99546', 'Adak', 'Alaska', 'AK', 'Aleutians West (CA)', '016', '51.8
74', '-176.634', '1']
['US', '99547', 'Atka', 'Alaska', 'AK', 'Aleutians West (CA)', '016', '52.1
961', '-174.2006', '1']
['US', '99591', 'Saint George Island', 'Alaska', 'AK', 'Aleutians West (C
A)', '016', '56.5944', '-169.6186', '1']
['US', '99638', 'Nikolski', 'Alaska', 'AK', 'Aleutians West (CA)', '016',
'52.9381', '-168.8678', '1']
['US', '99660', 'Saint Paul Island', 'Alaska', 'AK', 'Aleutians West (CA)',
```

In [5]:
```
with open('10_02_us.csv', 'r') as f:
    reader = csv.DictReader(f, delimiter='\t')
    for row in reader:
        print(row)
```

```
{'country': 'US', 'postal code': '99553', 'place name': 'Akutan', 'state':
'Alaska', 'state code': 'AK', 'county': 'Aleutians East', 'county code': '0
13', 'latitude': '54.143', 'longitude': '-165.7854', 'accuracy': '1'}
{'country': 'US', 'postal code': '99571', 'place name': 'Cold Bay', 'stat
e': 'Alaska', 'state code': 'AK', 'county': 'Aleutians East', 'county cod
e': '013', 'latitude': '55.1858', 'longitude': '-162.7211', 'accuracy':
'1'}
{'country': 'US', 'postal code': '99583', 'place name': 'False Pass', 'stat
e': 'Alaska', 'state code': 'AK', 'county': 'Aleutians East', 'county cod
e': '013', 'latitude': '54.8542', 'longitude': '-163.4113', 'accuracy':
'1'}
{'country': 'US', 'postal code': '99612', 'place name': 'King Cove', 'stat
e': 'Alaska', 'state code': 'AK', 'county': 'Aleutians East', 'county cod
e': '013', 'latitude': '55.0628', 'longitude': '-162.3056', 'accuracy':
'1'}
{'country': 'US', 'postal code': '99661', 'place name': 'Sand Point', 'stat
e': 'Alaska', 'state code': 'AK', 'county': 'Aleutians East', 'county cod
e': '013', 'latitude': '55.3192', 'longitude': '-160.4914', 'accuracy':
'1'}
```

Filtering data

In [6]:
```
with open('10_02_us.csv', 'r') as f:
    data = list(csv.DictReader(f, delimiter='\t'))
```

In [15]:
```
primes = []
for number in range(2, 99999):
    for factor in range(2, int(number**0.5) + 1):
        if number % factor == 0:
            break
    else:
        primes.append(number)
```

In [16]:
```
data = [row for row in data if int(row['postal code']) in primes and row['state
len(data)
```

Out[16]: 91

Writing

In [9]:
```
with open('10_02_ma_prime.csv', 'w') as f:
    writer = csv.writer(f)
    for row in data:
        writer.writerow([row['place name'], row['county']])
```

In [ ]:
```

```