Problem 3

Design and implement a class Country that stores the information on countries such as nation name, capital city, population, and area. Then write a program that reads in a set of countries and prints

In [10]:

```python
class Country:
    def __init__(self, name, area, pop, den, cap):
        self.name=name
        self.area=area
        self.pop=pop
        self.den=den
        self.cap=cap

def largest_area(c):
    target = []
    for _ in range(0, len(c)):
        target.append(c[_].area)
    return c[target.index(max(target))].name

def largest_pop(c):
    target = []
    for _ in range(0, len(c)):
        target.append(c[_].pop)
    return c[target.index(max(target))].name

def largest_den(c):
    target = []
    for _ in range(0, len(c)):
        target.append(c[_].den)
    return c[target.index(max(target))].name

def capital(c):
    cap = []
    for _ in range(0, len(c)):
        if(c[_].cap):
            cap.append(c[_].cap)
    return cap

korea = Country('Korea',1003,5178,509,'Seoul')
usa = Country('USA',98315,33100,35,'Washington')
china = Country('China',96000,143932,148,'Beijing')

print(largest_area([korea,usa,china]))
print(largest_pop([korea,usa,china]))
print(largest_den([korea,usa,china]))
print(capital([korea,usa,china]))
```

```
USA
China
Korea
['Seoul', 'Washington', 'Beijing']
```