

Activity 0

```
def modify_tup(tup):
    tup = tup + (4, 5)
    print(tup)

def modify_dict(d):
    d["hello"] = "world"
    print(d)

if __name__ == "__main__":
    tup = (1, 2, 3)
    modify_tup(tup)
    print(tup)
    d = {}
    modify_dict(d)
    print(d)
```

```
(1, 2, 3, 4, 5)
(1, 2, 3)
{'hello': 'world'}
{'hello': 'world'}
```

Activity 1

```
Count1:
1
2
Count2:
1
2
Count1:
3
4
```

Activity 2

```
class Counter:
    number_of_counters = 0

    # Constructor
    def __init__(self, max_tickets=None):
        self.ticket_num = 0
        self.max_tickets = max_tickets
        Counter.number_of_counters += 1

    def next_value(self):
        if self.max_tickets == self.ticket_num:
            self.ticket_num = None
        else:
            self.ticket_num += 1
        return self.ticket_num

    def reload(self):
        self.ticket_num = 0
```

Activity 3

```
class Student:
    unique_students = 0
    def __init__(self, name, id_num):
        self.name = name
        self.id = hash(unique_students)
        unique_students += 1
        self.units_completed = 0

    def add_units(self, units_to_add):
        self.units_completed += units_to_add

    def can_graduate(self):
        return self.units_completed >= 40
```