EXERCISE - Classes

Below is the class definition for a Student class.

```
class Student:
     def _ _init_ _(self, name, id):
           self._name = name
           self._id = id

     def get_name(self):
         return self._name
```

1. Write a method `get_id()` that returns a `Student` object's id.

2. Create a `Student` object with name 'Harry' and id 342.

Given the class definition of a Counter below:

```
class Counter:
    def __init__(self, name):
        self._name = name
        self._count = 0

    def click(self):
        self._count += 1

    def count(self):
         return self._count
```

3. Write a `reset()` method that will set the count to zero.

4. Write a `get_reset_count()` method that returns the number of times the counter has been reset. *Hint: you may need to add another attribute to the class definition.*

5. Write a `__str__()` method for `Counter`.

Consider the class definition for Point below:

```
import math
class Point:
    def __init__(self, x, y):
        self._x = x
        self._y = y
```

6. Write a method `translate` that changes a Point's location by a given dx, dy amount.

7. Write a method `distance_from_origin` that returns the distance between a Point and the origin, (0,0). Use the formula below:

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$