Lecture

__len__()

len()

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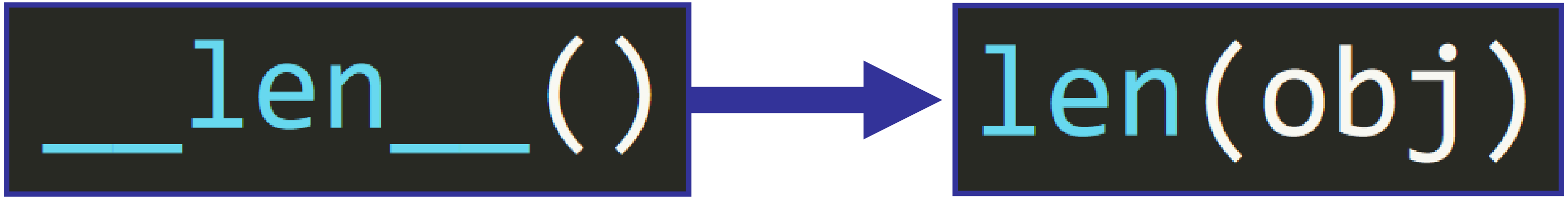
__len__()
```

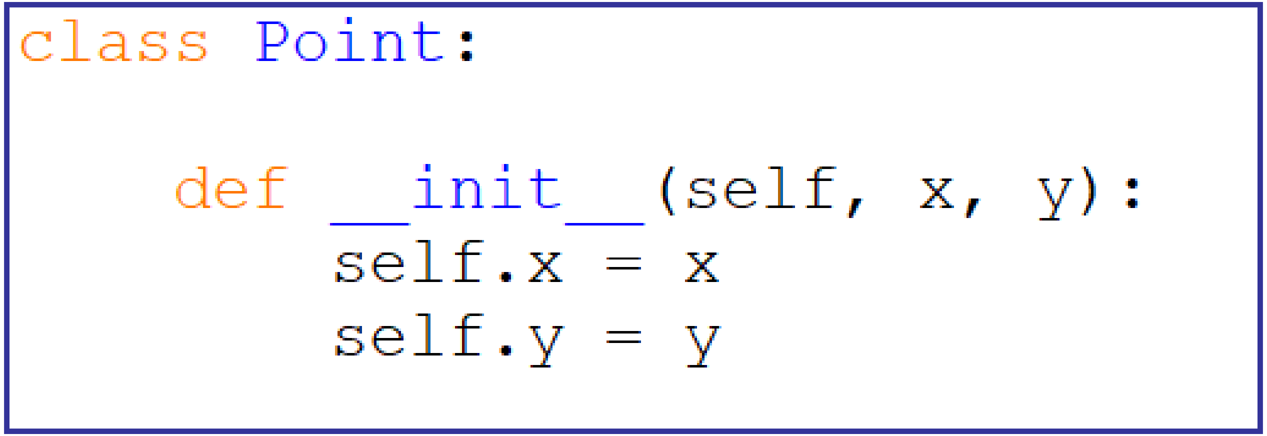
len()



```
__len__()
```

```
len(obj)
```

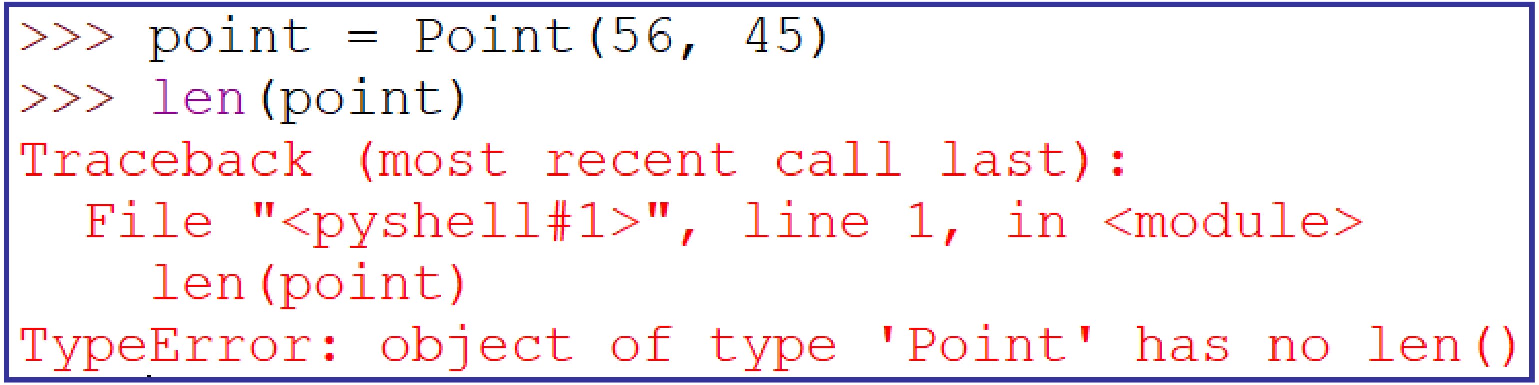
len()



```python
class Point:

    def __init__(self, x, y):
        self.x = x
        self.y = y
```

__len__()



```
>>> point = Point(56, 45)
>>> len(point)
Traceback (most recent call last):
  File "<pyshell#1>", line 1, in <module>
    len(point)
TypeError: object of type 'Point' has no len()
```

len()

```
class Point:

    def __init__(self, x, y):
        self.x = x
        self.y = y

    def __len__(self):
        """Distance from the origin (0,0) rounded to the nearest integer."""
        return round(self.x**2 + self.y**2)**(1/2))
```

len()

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__len__()

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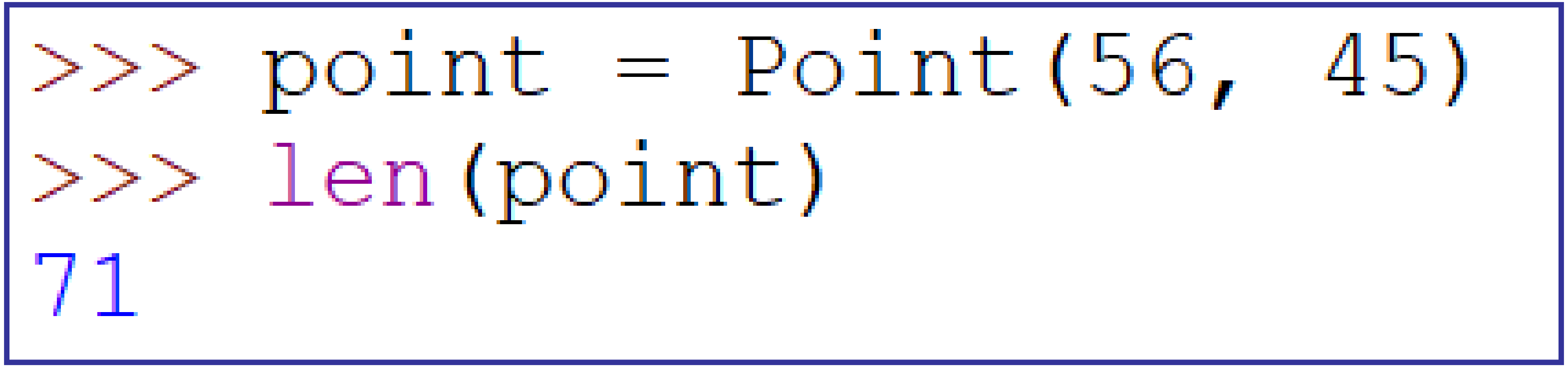
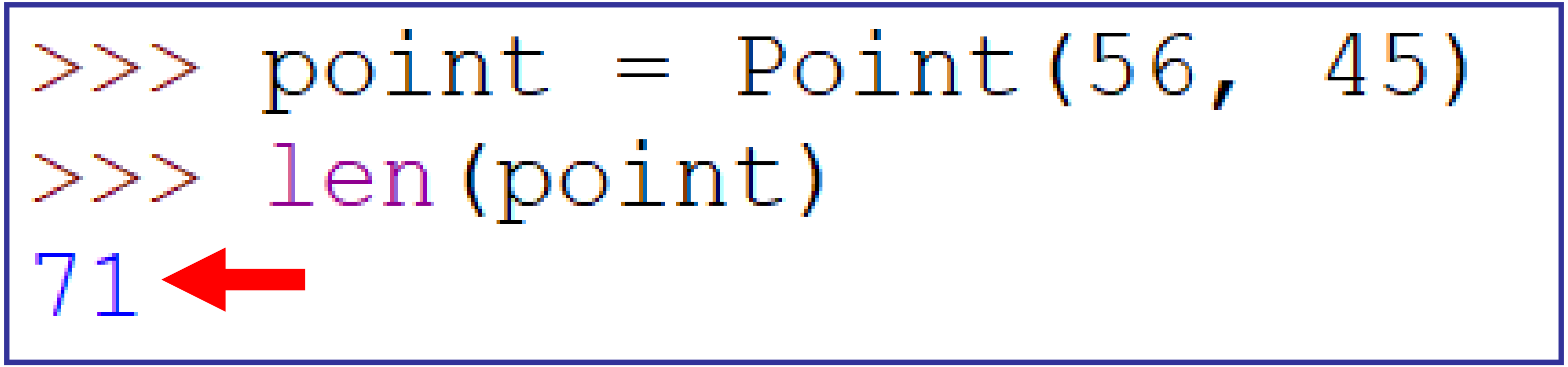
Must return an integer

len()



```
>>> point = Point(56, 45)
>>> len(point)
71
```

len()



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