

```

1 class Point:
2     """Models the idea of a point at location (x,y)."""
3     x: int
4     y: int
5
6     def __init__(self, x: int, y: int):
7         """Constructor definition!"""
8         self.x = x
9         self.y = y
10
11
12 class Path:
13     """Models the idea of a path from point a to b."""
14     a: Point
15     b: Point
16
17     def __init__(self, a: Point, b: Point):
18         """Constructor definition!"""
19         self.a = a
20         self.b = b
21
22     def scale(self, amount: int) -> None:
23         """Scales the points by a specified amount."""
24         self.a.x *= amount
25         self.b.y *= amount
26
27     def translate(self) -> None:
28         """Moves the points up 2 units and right 5 units."""
29         self.a.x += 5
30         self.a.y += 2
31         self.b.x += 5
32         self.b.y += 2
33
34
35 def main() -> None:
36     """Entrypoint of the program."""
37     p1: Point = Point(2, 1)
38     p2: Point = Point(3, 6)
39
40     line1: Path = Path(p1, p2)
41     line2: Path = line1
42
43     line2.translate()
44     line2.scale(2)
45
46     print(f"{line1.a.x} , {line1.a.y}")
47     print(f"{line2.a.x} , {line2.a.y}")
48
49
50 if __name__ == "__main__":
51     main()

```