Thomas Nguyen, Albert Nguyen
CS131-47853 MW 06:00 PM – 08:30 PM
Lab 9C

Lab 9C

Lab 9C - Code

IC_Bug.py

```
class Bug:
    def __init__(self, initialPosition):
        self._start = initialPosition
        self._currentPosition = 1.0

    def turn(self):
        self._start = -abs(self._start)
        return self._start
    def move(self):
        finalPosition = 0.0
        positiveNumber = 1.0
        negativeNumber = -abs(0.1)
        if self._start >= 0.0:
            finalPosition = self._start + positiveNumber
            self._start = finalPosition
            return self._start
        elif self._start < 0.0:
            finalPosition = self._start + 1.0
            self._start = abs(finalPosition)
            return self._start
    def getPosition(self):
        return self._start

```

bugsDemo.py

```
def main():
    from IC_Bug import Bug
    bugsy = Bug(10.0)
    bugsy.move()
    print("Expected %d: Actual: %d"
          % (bugsy.getPosition(), bugsy.getPosition()))
    bugsy.turn()
    bugsy.move()
    print("Expected %d: Actual: %d"
          % (bugsy.getPosition(), bugsy.getPosition()))
main()

```

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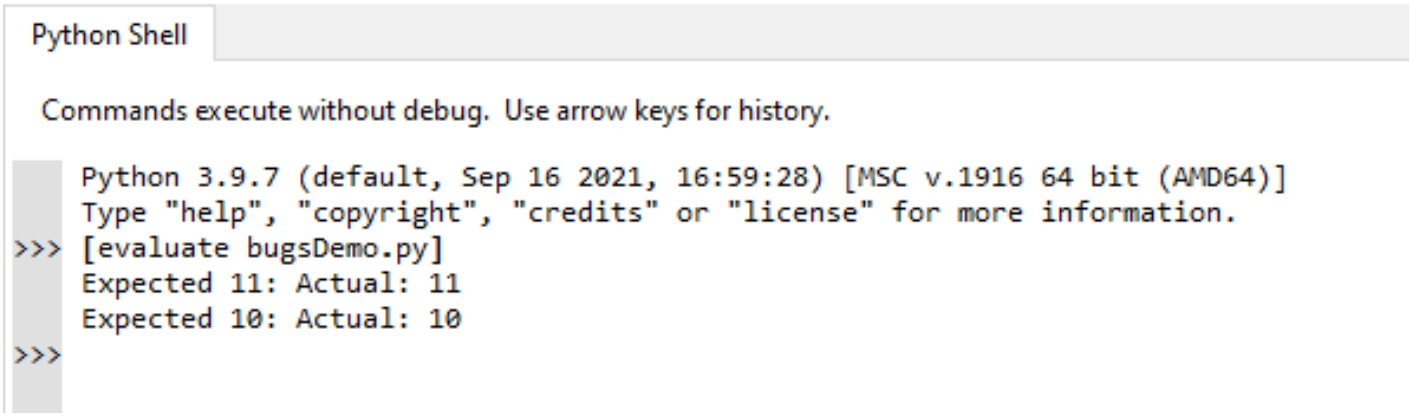
Lab 9C - Output

Python Shell: Wing



Lab 9C – Written Code

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        finalPosition = 0.0
        positiveNumber = 1.0
        negativeNumber = -abs(0.1)
        if self._start >= 0.0:
            finalPosition = self._start + positiveNumber
            self._start = finalPosition
            return self._start
        elif self._start < 0.0:
            finalPosition = self._start + 1.0
            self._start = abs(finalPosition)
            return self._start
    def getPosition(self):
        return self._start
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