

Quiz 1 Free Response (60 pts)

Time Limit: **8 mins**

Name: _____ Section: _____

You may run code when completing this part of Quiz 1.

Time limit: 8 mins

Free Response 1: closestMultipleOf5 (30 pts)

Write the function `closestMultipleOf5(x)` that takes an integer `x`, and returns the closest multiple of 5 to `x`.

For full credit, you may only use one `if-else` (not `elif`) statement in your solution.

Test cases:

```
def testClosestMultipleOf5():
    assert(closestMultipleOf5(2) == 0)
    assert(closestMultipleOf5(3) == 5)
    assert(closestMultipleOf5(5) == 5)
    assert(closestMultipleOf5(7) == 5)
    assert(closestMultipleOf5(8) == 10)

    assert(closestMultipleOf5(0) == 0)
    assert(closestMultipleOf5(-5) == -5)
    assert(closestMultipleOf5(-6) == -5)
    assert(closestMultipleOf5(-8) == -10)
```

Write your answer below.

Free Response 2: isSandwichNum (30 pts)

Background: n is a sandwich number (a coined term) if:

- n is a three digit integer.
- The first and last digits of n are equal.
- The middle digit is larger than the first and last digits.

With that in mind, write the function `isSandwichNum(n)` that takes a value n and returns `True` if n is a sandwich number, and `False` otherwise.

For example, 373 is a sandwich number, because the first and last digits are both 3, and the middle digit 7 is larger than 3.

Test cases:

```
def testIsSandwichNum():
    assert(isSandwichNum(373) == True)
    assert(isSandwichNum(191) == True)
    assert(isSandwichNum(121) == True)

    assert(isSandwichNum(123) == False)
    assert(isSandwichNum(313) == False)
    assert(isSandwichNum(999) == False)

    assert(isSandwichNum(99) == False)
    assert(isSandwichNum(1000) == False)
    assert(isSandwichNum(3.73) == False)
    assert(isSandwichNum('373') == False)
```

Write your answer below.