Regular Computer Science 1	Lab 14A 1-Day Minor Python Assignment
The "Simple Palindromes" Program	90 & 100 Point Versions

Assignment Purpose:

To gain a deeper understanding of string processing

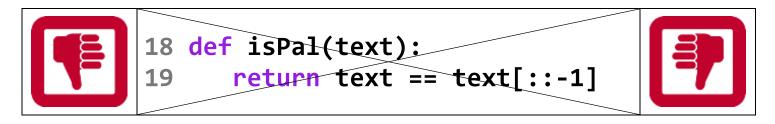
Write a program that determines if an entered string is a *Palindrome*. True Palindromes are strings of characters that read the same backward as forward. Examples of Palindromes are:

MADAM, RACECAR, BOB, HANNAH, CIVIC, KAYAK, LEVEL, REVIVER

```
Lab 14A Student Version
                          Do not copy this file, which is provided.
1 # Lab14Ast.py
2 # The "Simple Palindromes" Program
3 # This is the student, starting version of Lab 14A.
  # Students need to complete the <isPal> function.
  # NOTE: This lab is meant for students in REGULAR CS1.
         Students in CS1-HONORS will do Lab 14B.
6
7
8
  def heading():
9
10
     print()
     11
     print("Lab 14A, Simple Palindromes")
12
     print("90 Point Version")
13
     print("By: JOHN SMITH") # Substitute your own name here.
14
     15
16
17
18 def isPal(text):
19
     return False
20
21
22
23
24
25
```

```
MAIN
28 ##########
29
30 heading()
31 finished = False
32 while not finished:
      print("\n")
33
      text = input("Enter a string --> ")
34
                                   ".isPal(text))
35
      print("\nPalindrome:
      choice = input("\nDo you wish to repeat this program? {Y/N} --> ")
36
37
      if choice.upper()[0] != 'Y':
         finished = True
38
39
```

NOTE: There is an advanced form of *String Slicing* that lets you write the **isPal** function with a single command (shown below). This is NOT ALLOWED for this assignment. You will not receive ANY credit for Lab 14A if you code the isPal function in this manner.



90 Point Version Specifics

The main thing this program needs to do is determine if an entered string is a *Palindrome*. To do this, you must complete the isPal function. Right now, this function has a single line of code, which just returns False. This simply allows the program to execute. To complete the isPal function, you need to write the necessary code so that it returns **True** if the entered string is a *Palindrome* and returns **False** if it is not.

For this version, the **isPal** function is case-sensitive meaning that madam and MADAM are Palindromes, but *Madam* and *madaM* are not.

90 Point Version Output

```
----jGRASP exec: python Lab14Av90.py
   ***********
   Lab 14A, Simple Palindromes
   90 Point Version
   By: JOHN SMITH
   ************
   Enter a string --> MADAM
   Palindrome: True
   Do you wish to repeat this program? \{Y/N\} \longrightarrow Y
   Enter a string --> qwerty
>>
   Palindrome: False
   Do you wish to repeat this program? \{Y/N\} \longrightarrow Y
   Enter a string --> RaceCar
Palindrome: False
   Do you wish to repeat this program? \{Y/N\} --> N
    ----jGRASP: operation complete.
```

100 Point Version Specifics and Output

The 100 point version is very similar to the 90 point version except now the **isPal** function is no longer *case sensitive*. So while *madam* and *MADAM* were already Palindromes, now *Madam, mADAM*, and *mADam* are Palindromes as well.

```
----jGRASP exec: python Lab14Av100.py
   Lab 14A, Simple Palindromes
   100 Point Version
   By: JOHN SMITH
   ************
Enter a string --> MADAM
   Palindrome: True

ightharpoonup
   Do you wish to repeat this program? \{Y/N\} \longrightarrow Y
   Enter a string --> qwerty
   Palindrome: False
   Do you wish to repeat this program? \{Y/N\} \longrightarrow Y
   Enter a string --> RaceCar
>>
   Palindrome: True
   Do you wish to repeat this program? \{Y/N\} \longrightarrow N
----jGRASP: operation complete.
```