Lecture 15: Introduction to Computer Programming Course - CS1010

DEPARTMENT OF COMPUTER SCIENCE | 03/14/2019

Rensselaer

Announcements

- Exam 2 is scheduled for Thursday (March 21)
- We will review the exam on Monday (March 18)
- Rainbow Grades in Submitty:
  - Do not worry about the %age shown
  - Just look at Exam 1 Row

Goals for today

- For Loops
- Problems on For Loops
- In-Class exercise

Problem 1a

- Given a string and a substring, return true if substring is in the string.

Problem 1b

- Given a list of characters and a string. Return the number of characters that are there in the string.
- l1=['a','b','c','d','r']
- s1='c1tdoorrbin'
- Result: 4

Problem 2

- Write a program that returns a list of even numbers up to a given integer n.

Problem 3

- Write a Python program that accepts a word from the user and reverse it using for loop.

Problem 4

- Write a function that takes input as a string and a substring. Return the number of times the substring is found in the string.

Problem 5

- Given an array of integers, return True if the array contains a 2 next to a 2 somewhere.
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  has22([1, 2, 2]) → True
  has22([1, 2, 1, 2]) → False
  has22([2, 1, 2]) → False

Problem 6

- Given two strings, return True if either of the strings appears at the very end of the other string, ignoring upper/lower case differences (in other words, the computation should not be "case sensitive"). Note: s.lower() returns the lowercase version of a string.
- Test cases:
  end_other('Hiabc', 'abc') → True
  end_other('AbC', 'HiaBc') → True
  end_other('abc', 'abXabc') → True

Problem 7

- Write a Python program which iterates the integers from 1 to 50. For multiples of three print "Fizz" instead of the number and for the multiples of five print "Buzz". For numbers which are multiples of both three and five print "FizzBuzz".

Problem 8

- Write a Python program that accepts a string and calculate the number of digits and letters.

In Class Exercise

- Given in class

Next Class

Error and exception handling