**ITEC 136 Homework 4 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **[10 points]** Develop a program to replace parts of the string.

Write a function **replace(s, old, new)** that replaces all occurrences of **old** with **new** in the string **s**. It returns the modified string. **Don’t use the built-in replace function.** No global variables are used in the function. Function parameters must be used.

**Example:**

print(replace('Mississippi', 'i', 'I'))   
#Output: 'MIssIssIppI'  
  
s = 'I love spom! Spom is my favorite food. Spom, spom, spom, yum!'  
print(replace(s, 'om', 'am'))  
#Output: 'I love spam! Spam is my favorite food. Spam, spam, spam, yum!')

***Hint***: use the split and join methods.

1. **[10 points]** Develop a program to maintain a list of homework assignments. When an assignment is assigned, add it to the list with a due date, and when it is completed, remove it. No global variables are used in the function. Function parameters must be used.

Your program should provide the following functions:

* 1. Add a new assignment.
  2. Remove an assignment.
  3. Provide a list of the assignments in the order they were assigned. **The output should display each assignment line by line.**
  4. Provide a list of the assignments in the order they are due. **The output should display each assignment line by line.**

Use the following starter code to help. Read the comments carefully.

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| **def** add\_assignment(assignment\_list, assignment):  *# add assignment to assignment\_list*  **def** remove\_assignment(assignment\_list, assignment):  *# remove an assignment from the assignment\_list  # if the assignment exists in the assignment\_list*  **def** display\_assignments(assignment\_list):  print(**"Assignments in the order they were assigned"**)  *# print each assignment line by line*   **def** display\_assignments\_by\_due\_date(assignment\_list):  print(**"Assignments in the order they are due"**)  *# print each assignment line by line*  *# create an empty list to hold the assignments*  my\_assignments = []  *# create an assignment.*  *# Put date in first field with YYYY/MM/DD format* assignment1 = [**"2018/10/07"**, **"MATH101"**] *# create more assignments  # call add\_assignment function to add assignment* add\_assignment(my\_assignments, assignment1) *# call add\_assignment to add more assignments to the assignment\_list  # display the assignments by order they are entered  # and by the order they are due.*  *# call remove\_assignment to remove one assignment  # display the assignments by order they are entered and # by order they are due.* |

1. **[5 points]** Weekly Learning and Reflection  
   In two to three paragraphs of prose (i.e. sentences, not bullet lists) using APA style citations if needed, summarize and interact with the content that was covered in the introductory videos provided for this course. In your summary, you should highlight the major topics, theories, practices, and knowledge that were covered. Your summary should also interact with the material through personal observations, reflections, and applications to the field of study. In particular, highlight what surprised, enlightened, or otherwise engaged you. Make sure to include at least one thing that you’re still confused about. In other words, you should think and write critically not just about what was presented but also what you have learned through the session. Feel free to ask questions in this as well since it will be returned to you with answers.