

**ISDS 3107**  
**Assignment 3: Lists, Dicts, Loop, & Conditionals**  
**Due: 11 February 2020**

Description

The goal of this assignment is to demonstrate the ability to iterate over Python lists and dictionaries along with utilizing conditional statements to conduct calculations.

Examples of these types of operations will be discussed in the book and lectures.

**You must use 'for loops'.**



Requirements & Grading

Download the 'assignment3.py' file.

Using the mpg list, write a for loop that calculates the following:

- # - the total number of items (num\_items) in the list (10 points)
- # - the sum of all the numbers (sum\_items) in the list (15 points)
- # - the average of all the numbers (avg\_num) in the list (15 points)
- # - the largest number (largest\_num) in the list (15 points)
- # - smallest number (smallest\_num) in the list (15 points)
- # - the above must be completed using a single for loop (minus 10 points for more than one for loop)

Using the employee dict, write a for loop for the following:

- # - append the employee numbers (key) to a list emp\_numbers (10 points)
- # - append the employee names (value) to a list emp\_names (10 points)
- # - the above must be completed using a single for loop (minus 10 points for more than one for loop)

Turn-in files via Moodle

- # - update the string student\_name with your name – 5 pts
- # - python code file paws\_id + '\_assignment3.py' (jdavi48\_assignment3.py) – 5 pts