

## CS101 Homework 1/30/2022

- Save your code as *lastname\_homework.py* and submit on Google Classroom.
- Please, run your code before submitting.
- If you get an error, try to fix it before submitting your homework.
- If you get help from anyone, please, make sure that you actually understand the solution.

For all of the tasks below, you are asked to create a function AND test it.

### Task 1

Create a function that accepts any number of integers and returns a list of even numbers. Add error handling.

### Task 2

Create a function that accepts any numbers of integers and returns a list of *unique* values in no particular order (that is, all duplicates are removed). Add error handling.

### Task 3

Create a function that accepts a list of values and returns a list of these values squared. Add error handling.

### Task 4

Create a function that asks the use to enter their first and last name (in one query). The function returns the initials. For example, if I enter “John Doe”, the function returns “JD”. Hint: to separate the values entered by the user, use `.split()` string method.

### Task 5

Similar to the above, create a function that accepts a person’s first name and last name. This time, the function creates a dictionary item with the key being the initials and the value being the first and last name. For example, if the name is “John Doe”, the function creates “JD” key and “John Doe” value. Then this function *adds* this item to the dictionary that the user provides as another argument. That is, the function should look like this: `addname(newname, D)`, where `D` is the existing dictionary to which the item will be added. (You will need to create `D` in advance before using it as an argument). Run you function in a loop to add 3 names (you may want to create a list of 3 names before using its elements in the loop).