***Handong Honor Code***

- You are responsible for understanding and complying with Handong Honor Code.
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# Assignment 04

## 1

You're provided with the variable `books` that has the names of the Bible books. There are duplicates in this list. You must use a for-loop *only once* to remove duplicates and store the unique names in the list `unique`.

In [1]:

```python
books = [
    "Lamentations", "Ezekiel", "Daniel", "Hosea", "Joel",
    "Amos", "Obadiah", "Jonah", "Micah", "Nahum",
    "Habakkuk", "Zephaniah", "Haggai", "Micah", "Zechariah", "Malachi"
]

unique = []
### YOUR CODE STARTS HERE

### YOUR CODE ENDS HERE
print(unique)

"""
### YOUR EXPLANATION STARTS HERE

### YOUR EXPLANATION ENDS HERE
"""
```

## 2

You're given with two matrices `A` and `B`. Use a nested for-loop to perform matrix addition $C = A + B$.

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

$$B = \begin{bmatrix} 5 & 6 \\ 7 & 8 \end{bmatrix}$$

$$C = A + B = \begin{bmatrix} 6 & 8 \\ 10 & 12 \end{bmatrix}$$

In [3]:

```python
matrix_A = [
    [1,2],
    [3,4]
]

matrix_B = [
    [5,6],
    [7,8]
]

matrix_C = [
    [None,None],
    [None,None]
]

### YOUR CODE STARTS HERE

### YOUR CODE ENDS HERE
print(matrix_C)

"""
### YOUR EXPLANATION STARTS HERE

### YOUR EXPLANATION ENDS HERE
"""
```

# 3

Print `access granted` only if the user enters the correct password. Allow max three attempts. If the user enters an incorrect password three times, print `Your account is locked.`

You must use a *while-loop*.

```python
success = False
### YOUR CODE STARTS HERE

### YOUR CODE ENDS HERE
if success:
    print("Access granted!")
else:
    print("Your account is locked.")

"""
### YOUR EXPLANATION STARTS HERE

### YOUR EXPLANATION ENDS HERE
"""
```

# 4

There are three students. Each students took three exams.

Calculate each student's average exam score.

Store each student's name and average score in the `transcripts` dictoinary (name being the key, average score being the value).

In [8]:

```python
records = [["John", 90, 80, 79], ["Daniel", 84, 99, 91], ["Isaiah", 95, 80, 72]]
transcripts = {}
### YOUR CODE STARTS HERE

### YOUR CODE ENDS HERE
for name, avg in transcripts.items():
    print(f"{name}'s average = {avg:.2f}")

"""
### YOUR EXPLANATION STARTS HERE

### YOUR EXPLANATION ENDS HERE
"""
```