
CECS 174 – LAB ASSIGNMENT 5

OBJECTIVES:

- Able to use a Python 3.x IDE to build Python program(s)
- Implement a solution that requires **tuple and list**.
- Implement a solution that use **repetition**
- Write Python code following an algorithm.
- Form a sophisticated expression in Python

INSTRUCTIONS:

PART 1

Grading an exam: One teacher, from Woodbridge High School in Irvine, give a quiz every week. The quiz has 15 questions and 1 bonus question; all questions are multiple choice questions. Each student will get 100% if she or he gets 15 correct. In other words, the maximum score is 15 and students have 16 questions to get 15 correct.

Next week quiz has the following answers:

1. C
2. B
3. A
4. A
5. D
6. C
7. C
8. B
9. D
10. D
11. A
12. C
13. D
14. A
15. B
16. B

Write a program that accepts the answers from the user and grade the exam. You are **required to use a list, a tuple, and a loop to do the grading**. The output can be like the following display:

This student has 12 correct answers and the percent score is 80%

PART 2

Create a hand of 5 cards:

In this assignment, do the following steps

- 1- Create a **tuple** that stores 4 card suits: club, diamond, heart, spade.
- 2- Create another **tuple** that stores ranks of cards: Ace, 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Queen, King and Diamond.

- 3- Use **a list** to implement a hand of 3 cards, for **the user**
- 4- Use another list to implement a **hand** of 3 cards **for the computer**.
- 5- Then display the cards for users and for computers.
- 6- Note that **a card can not appear twice**. So, your algorithm must enforce this rule. For example, this hand is illegal: Jack of Spade, 3 of Heart and 3 of Heart. Another illegal example is as follows
 - a. user hand – 10 of Club, 4 of Diamond, 3 of Space
 - b. computer hand - 4 of Diamond, 3, of Club, 6 of Club
(because 4 of Diamond appeared twice)
- 7- You **cannot use function** in this program, (def keyword). And, you must use **loop**

Hint: for each number between 0 and 51, you can determine suit and rank **using modulus operator**.

FOR YOUR INFORMATION

Make sure you comment your code. Also Design an algorithm with pseudocode before you write your Python code.

TURN IN

- Turn in **your code and images of your test runs**, (i.e. several runs) in **1 single PDF document**.
- Your document with have 2 parts because this assignment has 2 parts.
- Your turn in document must be in **PDF format**. Upload to the BeachBoard account of this class.