Programmers Journal - Unit 3 Lesson 4

During this lesson I learned how to use the random function in a list to pull a random index in the list and have it be printed out. Also, I learned how to use pop in the code to have a certain part of the list be removed. I had some difficulty with exercise 12.4 to sort the list by how many occurrences the letter has, as well as the letter in the alphabet.

**Exercise 12.1**

**import random**

**answers = [ "It is certain", "It is decidedly so", "Without a \**

**doubt", "Yes, definitely", "You may rely on it", "As I see it, \**

**yes", "Most likely", "Outlook good", "Yes", "Signs point to yes",**

**"Reply hazy try again", "Ask again later", "Better not tell you \**

**now", "Cannot predict now", "Concentrate and ask again", "Don ' t \**

**count on it", "My reply is no", "My sources say no", "Outlook \**

**not so good", "Very doubtful" ]**

**while True:**

**question = input("what is your question? ")**

**print("the magic 8ball says: ", answers[random.randint(1, (len(answers))-1)])**

**Exercise 12.2**

**import random**

**deck = []**

**for value in ("Ace", "2", "3", "4", "5", "6", "7", "8", "9", "10", "Jack", "Queen", "King"):**

**for suit in ("Hearts", "Spaces", "Clubs", "Diamonds"):**

**deck.append(value + " " + suit)**

**for i in range(len(deck)):**

**r = random.randint(i, len(deck)-1)**

**deck[i], deck[r] = deck[r], deck[i]**

**for i in deck:**

**print(i)**

**Exercise 12.3**

**FIFO = []**

**while True:**

**data = input("what would you like to add to queue?: ")**

**if data == "":**

**break**

**elif data == "?":**

**if FIFO == []:**

**print("the list is empty.")**

**elif len(FIFO) > 0:**

**print(FIFO.pop(0))**

**else:**

**FIFO.append(data)**

**print("program end...")**

**Exercise 12.4**

**def getLetter( x ):**

**return x[0], -ord(x[1])**

**while True:**

**countlist = []**

**text = input("Hello! please enter a string(enter nothing to exit): ")**

**if text == "":**

**break**

**else:**

**for i in range(26):**

**countlist.append([0, chr(ord("a")+i)])**

**for letter in text.lower():**

**if letter >= "a" and letter <= "z":**

**countlist[ord(letter)-ord("a")][0] += 1**

**countlist.sort(reverse=True, key=getLetter)**

**for i in countlist:**

**if i[0] > 0:**

**print("{}: {}".format(i[0], i[1]))**

**print("""\**

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