

Syntactic Sugar Quiz

CSCI040: ~~Computing for the Web~~ Introduction to Hacking

Total Score: /10

Printed Name:

Collaboration Policy:

1. You MAY use any printed or handwritten notes.
2. You MAY NOT use a computer or any other electronic device.
3. You MAY NOT discuss this quiz with another human being who has not completed the quiz. This includes:
 - (a) collaborating during the quiz, and
 - (b) telling a student in a different section the quiz was easy/hard.

Problem 1. What is the output of the following code:

```
names = [ 'alice', 'bob', 'charlie', 'dave', 'eve' ]
accumulator = []
for i,name in enumerate(names):
    text = 'number_' + str(i) + '_is_' + name
    accumulator.append(text)
print( 'accumulator[-1]=', accumulator[-1])
```

Problem 2. What is the output of the following code:

```
x = 0 if 1 else 2
print( 'x=', x)
```

Problem 3. What is the output of the following code:

```
sentence = "This is an example sentence with a few words in it."  
tokens = [ token.lower() for token in sentence.split() if 't' in token ]  
print('len(tokens)=', len(tokens))
```

Problem 4. What is the output of the following code:

```
xss = [ [ i for i in range(x) ] for x in [1, 2, 3] ]  
x = xss[-1][-2]  
print('x=', x)
```

Problem 5. What is the output of the following code:

```
tweets = [
    { "source": "Twitter_Web_Client"
      , "text": "From_Donald_Trump: _Wishing_everyone_a_wonderful_holiday _&_a_
        happy,_healthy,_prosperous_New_Year._Let\u2019s_think_like_champions_
        in_2010!"
      , "retweet_count": 28
    },
    { "source": "Twitter_Web_Client"
      , "text": "Trump_International_Tower_in_Chicago_ranked_6th_tallest_
        building_in_world_by_Council_on_Tall_Buildings _&_Urban_Habitat_http://
        bit.ly/sqvQq"
      , "retweet_count": 33
    },
    { "source": "Twitter_Web_Client"
      , "text": "Wishing_you_and_yours_a_very_Happy_and_Bountiful_Thanksgiving!"
      , "retweet_count": 13
    },
    { "source": "Twitter_for_iPhone"
      , "text": "RT_@realDonaldTrump: _Happy_Birthday_@DonaldJTrumpJr!\nhttps://t
        .co/uRxyCD3hBz"
      , "retweet_count": 9529
    },
    { "source": "Twitter_for_iPhone"
      , "text": "Happy_Birthday_@DonaldJTrumpJr!\nhttps://t.co/uRxyCD3hBz"
      , "retweet_count": 9529
    },
    { "source": "Twitter_for_Android"
      , "text": "Happy_New_Year_to_all,_including_to_my_many_enemies_and_those_
        who_have_fought_me_and_lost_so_badly_they_just_don't_know_what_to_do..
        Love!"
      , "retweet_count": 141853
    },
    { "source": "Twitter_for_Android"
      , "text": "Russians_are_playing_@CNN_and_@NBCNews_for_such_fools_-_funny_
        to_watch,_they_don't_have_a_clue!_@FoxNews_totally_gets_it!"
      , "retweet_count": 23213
    },
    { "source": "Twitter_for_iPhone"
      , "text": "Join_@AmerIcan32,_founded_by_Hall_of_Fame_legend_@JimBrownNFL32
        _on_1/19/2017_in_Washington,_D.C._\u2026_https://t.co/9WJZ8iTCQV"
      , "retweet_count": 7366
    }
  ]

tweets = [tweet for tweet in tweets if 'iphone' in tweet['source'].lower()]
print('len(tweets)=', len(tweets))
```