Unit 6 - Week 5

Thank you for taking the Assignment 5.

Assignment 5

Your last recorded submission was on 2020-10-20, 15:27 IST **Due date: 2020-10-21, 23:59 IST.**

NOTE: Python 3.7 has been used for this Assignment

1) Select the command to empty or reset the 'employee' dictionary. ***1 point***

- (●) del employee
- ( ) del employee[0:2]
- ( ) employee.remove()
- ( ) employee.clear()

2) Which of the following code represents creating a dictionary from a list where keys are the unique elements from the list and the value corresponding to a key is the number of times that key occurs in the list. ***1 point***

( )
```
dict1={}
list1=[1,2,4,5,3,2,4,5,6,7,8,1,2,3,4,6,9,10]
for each in list1:
        if each not in dict1:
                dict1[each]=1
        else:
                dict1[each]=dict1[each]+list1.count(each)
print(dict1)
```

( )
```
dict1={}
list1=[1,2,4,5,3,2,4,5,6,7,8,1,2,3,4,6,9,10]
for each in list1:
        if each not in dict1:
                dict1[each]=0
        else:
                dict1[each]=dict1[each]+list1.count(each)
print(dict1)
```

(●)
```
dict1={}
list1=[1,2,4,5,3,2,4,5,6,7,8,1,2,3,4,6,9,10]
for each in list1:
        if each not in dict1:
                dict1[each]=1
        else:
                dict1[each]=dict1[each]+1
print(dict1)
```

( ) none of these

3) Identify the audio file format that is NOT supported by Python Speech Recognition Module. ***1 point***

- ( ) FLAC
- ( ) AIFF
- ( ) WAV
- (●) MP3

4) Which of the following exception can be used to handle the error that occurs when Google cannot understand the audio content in speech recognition? ***1 point***

- (●) UnknownValueError
- ( ) RequestError
- ( ) ValueError
- ( ) RunTimeError

5) Which of the following statements is correct for the Monte Hall problem? ***1 point***

Statement I: If you choose the correct door on the first try, then switching loses
Statement II: Contestants who switch have 2/3 chances to win whereas contestants who donot switch have 1/3 chances of win.

- ( ) I only
- ( ) II only
- (●) Both I & II
- ( ) None

Assessment submitted.
X

- Programming Assignment 3: Function and Dictionary (/noc20_cs83/progassignment?name=291)
- **Quiz : Assignment 5 (assessment?name=297)**
- Week 5 Feedback Form : The Joy of Computing using Python (unit?unit=104&lesson=123)

Week 6

Text Transcripts

Download Videos

Books

6) Which of the random experiments from the options does the code represent? ***1 point***

```
import random
p1=['rock','paper','scissor']
p2=['rock','paper','scissor']
c1=random.choice(p1)
c2=random.choice(p2)
if(c1==c2):
        print('SUCCESS')
else:
        print('FAIL')
```

- (selected) Prints a success when both people select the same object
- Prints a success when both people select “rock”
- Prints a success when both people select different objects
- None of the above

7) What does the following code represent? ***1 point***

```
import random
x=0
y=0
while(1):
        r = random.uniform(0,1)
        if (r<0.4):
                x=x+1
        elif (r<0.8):
                y=y+1
        else:
                x=x+1
                y=y+1
        print 'location=(',x,',',y,')'
        input("enter a key to continue")
```

- A drunkard moving on a straight line, moving one step forward with probability 0.4, one step backward with probability 0.4 and staying at the same place with probability 0.2
- A drunkard moving on a XY plane, moving right with probability 0.4, upwards with probability 0.8 and diagonally up-right with probability 1.
- (selected) A drunkard moving on a XY plane, moving right with probability 0.4, upwards with probability 0.4 and diagonally up-right with probability 0.2.
- A drunkard moving on a XY plane, moving left with probability 0.4, downwards with probability 0.8 and diagonally down-left with probability 1.

8) The following code takes a list as input and prints the sorted list as an output. The outer for loop is to count the number of iterations. What is the purpose of the inner for loop? ***1 point***

```
def bubble(mylist):
        n=len(mylist)
        for i in range(n):
                for j in range(0,n-i-1):
                        if mylist[j]>mylist[j+1]:
                                mylist[j],mylist[j+1]=mylist[j
                                    +1] ,mylist[j]
        print(mylist)
```

- (selected) To fetch the pair of consecutive elements to be compared
- Index of the element for which the right position is to be found
- To identify the max element
- To check if the list is sorted

9) The following code to its best, represents a scenario: ***1 point***

```
def func(i,f):
        print(i)
        if(i==0):
                f=1
                func(i+1,f)
        if(i==128):
                f=-1
                func(i-1,f)
        if(f==1):
                func(i+1,f)
        if(f==-1):
                func(i-1,f)
```

- A cake getting eaten by half of its current amount every time
- A student attempting alternate questions, starting from a given question
- Viruses doubling inside a body and killing the person once their population becomes 128 or more.
- (selected) Metro train serving 128 stations to and from

10) Given that you have a sorted list of 1000 elements and the element to find is at the end of your list(worst case), what is the number of comparisons to search such an element using linear search and binary search? ***1 point***

- (selected) 1000, 10
- 10, 2
- 1000, 2
- 10, 10

You may submit any number of times before the due date. The final submission will be considered for grading.

Submit Answers