Unit 7 - Week 1 - Introduction

Assignment 1

The due date for submitting this assignment has passed. **Due on 2019-08-14, 23:59 IST.**
As per our records you have not submitted this assignment.

1) Let **L = ["one", "two", ["three", "four", "five", "six"], "seven", ["eight"], [ ]]** be the list. What will be the output of **len(L)** (written in Python3)? ***1 point***

- 5
- 6
- 8
- 9

No, the answer is incorrect.
Score: 0
Accepted Answers:
6

2) Which of the following functions is used to create a directed graphs with self loops and parallel edges in NetworkX? ***1 point***

- networkx.MultiDirectedGraph()
- networkx.Multi_Di_Graph()
- networkx.MultiDiGraph()
- networkx.Graph(create_using = 'Multi Directed')

No, the answer is incorrect.
Score: 0
Accepted Answers:
networkx.MultiDiGraph()

3) If **string = 'Mississippi'** , what will be the output of **string[0:6]** (written in Python3)? ***1 point***

- 'Missis'
- 'Mississ '
- 'Mississi'
- TypeError

No, the answer is incorrect.
Score: 0
Accepted Answers:
'Missis'

4) Total number of possible edges on a graph (undirected and without loops) on n vertices is **not** : ***1 point***

- $\frac{n(n-1)}{2}$
- $\binom{n}{2}$
- $1+2+3+....+(n-1)+n$
- $1+2+3+....+n-1$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$1+2+3+....+(n-1)+n$

5) If **d = {0:'a', 1:'b', 2:'c', 3:'d'}** is the dictionary then which among the following codes (written in Python3) would reverse **keys** and **values** of **d**? ***1 point***

- { v:k for k,v in d.items() }
- { d[i]:i for i in range(4) }
- { d[i]:i for i in d }
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
All of the above

6) Let the number of atoms in the explored universe be 10^{80} . Pick the smallest number of nodes from the below given options such that the number of possible graphs on that many nodes is greater or equal to the number of atoms in the explored universe. (Assume $\log_2 10 = 3.3$) ***1 point***

- 23
- 24
- 25
- 26

No, the answer is incorrect.
Score: 0
Accepted Answers:
24

7) What is the output of the following code snippet (written in Python3) ***1 point***

```
import networkx
G = networkx.Graph ()
G. add_edges_from ( [ (1,2),(1,3),(4,1),(1,5) ] )
G. remove_node (1)
print (len(G.edges ()))
```

- 0
- 1
- 2
- 3

No, the answer is incorrect.
Score: 0
Accepted Answers:
0

8) Let t be a tuple **("social", "networks", "IIT")**. What will be the output of t.append(("Ropar")),written in Python3? ***1 point***

- ("social", "networks", "IIT", "Ropar")
- ("social", "networks", "IIT", ("Ropar"))
- ("social", "networks", ("IIT", "Ropar"))
- Attribute Error

No, the answer is incorrect.
Score: 0
Accepted Answers:
Attribute Error

9) Which of the following is correct? ***1 point***

(A) A variable name must start with a letter or the underscore character
(B) A variable name can start with a number
(C) A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and_)
(D) Variable names are case-sensitive (ropar, Ropar and ROPAR are three different variables)

- Only A and B
- Only A, B and C
- Only B and D
- Only A, C and D

No, the answer is incorrect.
Score: 0
Accepted Answers:
Only A, C and D

10)For integers n > 1, let G_n be a complete graph on n vertices such that each vertex is labeled by a distinct number 1, 2, 3, · · · , n, and each edge is labeled by the sum of its endpoint labels. The sum of all the edge labels is: ***1 point***

- $\frac{n(n-1)^2}{2}$
- $\frac{n(n-1)(n+1)}{2}$
- $n(n-1)(n+1)$
- $\frac{n(n+1)}{2}$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$\frac{n(n-1)(n+1)}{2}$