X

Week 12 : Assignment

The due date for submitting this assignment has passed.

Due on 2023-10-18, 23:59 IST.

Assignment submitted on 2023-10-18, 09:50 IST

1) What is a sink? ***1 point***

- A node with no incoming edges.
- A node with maximum incoming edges.
- A node with maximum outgoing edges.
- A node with no outgoing edges.

Yes, the answer is correct.
Score: 1

Accepted Answers:
A node with no outgoing edges.

2) What should we do when encountering a sink in the case of page rank algorithm? ***1 point***

- Stop the algorithm.
- Start with the last node.
- Randomly choose a node from all nodes.
- Randomly choose a node from neighbor nodes.

Yes, the answer is correct.
Score: 1

Accepted Answers:
Randomly choose a node from all nodes.

3) In the page rank algorithm ***1 point***

- We randomly travel from node to node without any relationship.
- We randomly travel from node to neighbor node.
- The maximum visited node will be the leader.
- B and C
- A and C

Yes, the answer is correct.
Score: 1

Accepted Answers:
B and C

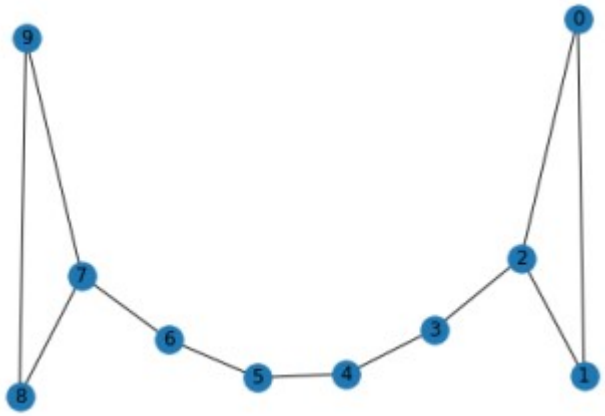
4) If we perform the page rank algorithm on the web as a graph, which of the following is true? ***1 point***

- Websites are nodes and hyperlinks in websites are edges.
- Hyperlinks in websites are nodes and websites are edges.
- Websites will work as nodes and edges.
- Hyperlinks will work as nodes and edges.

Yes, the answer is correct.
Score: 1

Accepted Answers:
Websites are nodes and hyperlinks in websites are edges.

5) Identify the type of graph: ***1 point***



- Triangle Graph
- Directed Graph
- Barbell Graph
- Wheel graph

Yes, the answer is correct.
Score: 1

Accepted Answers:
Barbell Graph

6) Which of the following python function will return random floating point number between 0 and 1? ***1 point***

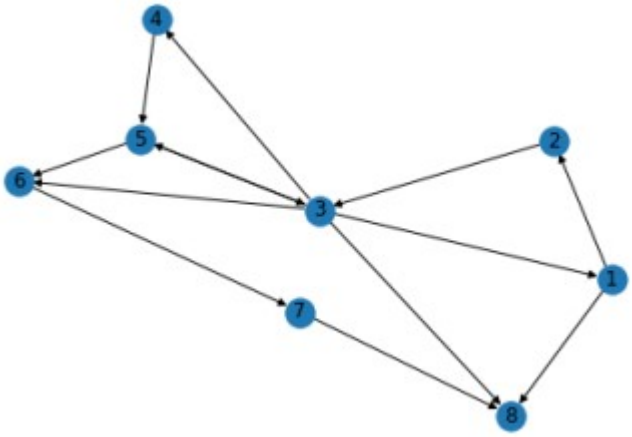
- random.float()

- random.randomfloat()
- random.frandom()
- random.random()

Yes, the answer is correct.
Score: 1

Accepted Answers:
random.random()

7) What will be the **G.out_degree(3)** for the following graph(G) ? ***1 point***



- 4
- 5
- 3
- 6

Yes, the answer is correct.
Score: 1

Accepted Answers:
5

8) In the page rank algorithm the leader is decided by? ***1 point***

- A node(person) with maximum number of outgoing edges.
- A node(person) with maximum number of incoming edges.
- A node(person) which is visited maximum times.
- Can not decide.

Yes, the answer is correct.
Score: 1

Accepted Answers:
A node(person) which is visited maximum times.

9) Which of the following is true about directed graphs? ***1 point***

- One can come back and forth from one node to another using a single edge.
- One can only go forward from one node to another using a single edge.
- One can go to any node from one node using one edge.
- None of the above.

Yes, the answer is correct.
Score: 1

Accepted Answers:
One can only go forward from one node to another using a single edge.

10) What will be the output of the following code? ***1 point***

```
word = 'Hey there!'
print(list(word))
```

- ['Hey', 'there', '!']
- ['Hey', 'there', ' ', '!']
- ['H', 'e', 'y', ' ', 't', 'h', 'e', 'r', 'e', '!']
- ['H', 'e', 'y', 't', 'h', 'e', 'r', 'e', '!']

Yes, the answer is correct.
Score: 1

Accepted Answers:
['H', 'e', 'y', ' ', 't', 'h', 'e', 'r', 'e', '!']