

Unit 9 - Week 7

Course outline

How does an NPTEL online course work?

Week 0 Assignment 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Peer to Peer Systems in Cloud Computing

MapReduce

Week 7: Lecture Material

Quiz : Assignment-7

Week 7 - FEEDBACK

Assignment-7 Solution

Week 8

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LIVE Session

Assignment-7

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-03-18, 23:59 IST.

1) The number of maps in MapReduce is usually driven by the total size of _____

1 point

- Inputs
- Outputs
- Tasks
- None of the mentioned

No, the answer is incorrect.
Score: 0

Accepted Answers:
Inputs

2) Consider the pseudo-code for MapReduce's Word Count example (not shown here). Let's now assume that you want to determine the frequency of phrases consisting of 3 words each instead of determining the frequency of single words. Which part of the (pseudo-)code do you need to adapt?

1 point

- Only map()
- Only reduce()
- Both map() and reduce()
- The code does not have to be changed

No, the answer is incorrect.
Score: 0

Accepted Answers:
Only map()

3) What is the characteristic of P2P network?

1 point

- Self-Adaptation
- Dealing with instability
- Fault Tolerance
- All of the mentioned

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the mentioned

4) Consider the given table of P2P systems and find out the correct match:

1 point

P2P System	Property
(P) Napster	(i) Clients act as servers too, called servents
(Q) Gnutella	(ii) Some peers designated as supernodes
(R) FastTrack	(iii) Centralized server
(S) BitTorrent	(iv) Prefer early download of blocks that are least replicated among neighbours

- (P): (i), (Q): (ii), (R): (iii), (S): (iv)
- (P): (iii), (Q): (iv), (R): (i), (S): (ii)
- (P): (iii), (Q): (i), (R): (ii), (S): (iv)
- (P): (iv), (Q): (iii), (R): (i), (S): (ii)

No, the answer is incorrect.
Score: 0

Accepted Answers:
(P): (iii), (Q): (i), (R): (ii), (S): (iv)

5) In a Chord structured DHT (Distributed Hash Table) with N nodes, how many hops would a lookup operation require?

1 point

- N
- N/2
- log(logN)
- log(N)

No, the answer is incorrect.
Score: 0

Accepted Answers:
log(N)

6) _____function merges all intermediate values associated with the same intermediate key.

1 point

- Map
- Reduce
- Both Map and Reduce
- None of the mentioned

No, the answer is incorrect.
Score: 0

Accepted Answers:
Reduce

7) Suppose our input data to a map-reduce operation consists of integer values (the keys are not important). The map function takes an integer i and produces the list of pairs (p,i) such that p is a prime divisor of i.

1 point

For example, map(12) = [(2,12), (3,12)]. Compute the Map output, if the input is the set of integers 15, 21, 24, 30, 49.

- Map: [(2,24),(2,30)], [(3,15),(3,21),(3,24),(3,30)], [(5,15),(5,30)], [(7,21),(7,49)]
- Map: [(2,24),(2,30)], [(3,15),(3,21),(3,24),(3,30)]
- Map: [(5,15),(5,30)], [(7,21),(7,49)]
- Map: [(2,54)], [(3,90)], [(5,45)], [(7,70)]

No, the answer is incorrect.
Score: 0

Accepted Answers:
Map: [(2,24),(2,30)], [(3,15),(3,21),(3,24),(3,30)], [(5,15),(5,30)], [(7,21),(7,49)]

8) Which of these P2P system uses a 1 hop Lookup DHT (Distributed Hash Table) ?

1 point

- CAN
- CHORD
- Kelips
- Gnutella

No, the answer is incorrect.
Score: 0

Accepted Answers:
Kelips