10) **Statement 1:** Map operation consists of transforming one set of key-value pairs to another.   *1 point*
Statement 2: Each reducer groups the results of the map step using the same key.

- ⦿ a. Both statements are true
- ◯ b. Both statements are false
- ◯ c. Statement 1 is true and Statement 2 is false
- ◯ d. Statement 1 is false and Statement 2 is true

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

Submit Answers

Week 05 : Assignment 05

1) In a SLA negotiation, the provider agreed with the service availability of 98%. The consumer runs the application for X hours/day. At the end of *1 point* one month [31 days], the total service outage was 12 hrs. However, SLA negotiation (in terms of service availability) is honored.

- ● a. X is atleast 19.74
- ○ b. X is atmost 19.74
- ○ c. X is exactly 19.74
- ○ d. Insufficient information

2) Average resource demand is 45 units,Baseline (owned) unit cost is 200 units,Time is 10 hours,Peak resource demand is 100 units. If the cloud is *1 point* cheaper than owning of computer infrastructures, the utility premium is

- ● a. Greater than 2.22
- ○ b. Less than 2.22
- ○ c. Atleast 4.45
- ○ d. Atmost 4.45

3) In computing, there is a linear relationship between the number of processing cores used and power consumption. *1 point*

- ○ a. TRUE
- ● b. FALSE

4) The _____ takes a series of key/value pairs, processes each, and generates zero or more output. *1 point*

- ● a. map function
- ○ b. partition function
- ○ c. reduce function
- ○ d. None of these

5) In a MapReduce framework the HDFS block size is 64 MB. We have 6 files of size 64KB, 65MB, X MB, Y KB, 67KB and 127MB. 24 blocks are created by Hadoop framework. The size of X and Y are respectively [one or more than one options may be correct, select all correct options]: **1 point**

- ☐ a. 66 and 64
- ☑ b. 64 and 64
- ☑ c. 64 and 66
- ☐ d. 128 and 64

6) Which among the following is/are logical resource(s)? **1 point**

- ◯ a. Network
- ◯ b. Computer
- ◯ c. Database
- ◉ d. Execution

7) When load decreases, VM management can be done by **1 point**

- ☑ a. Live migrate VMs to more utilized nodes
- ☑ b. Shutdown unused nodes
- ☐ c. Migrate VMs to less utilized nodes
- ☐ d. None of these

8) Correspondence between resources required by the users and resources available with the provider is known as **1 point**

- ◯ a. Resource provisioning
- ◯ b. Resource adaptation
- ◉ c. Resource mapping
- ◯ d. None of these

9) Ability or capacity of that system to adjust the resources dynamically to fulfill the requirements of the user is known as **1 point**

- ◯ a. Resource provisioning
- ◉ b. Resource adaptation
- ◯ c. Resource mapping
- ◯ d. None of these