Session

4:

Hadoop

Configuration and Eco System

Assignment 2

Big Data and Hadoop Development

Quiz

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1.Introduction

In this assignment you need to answer the questions related to topics covered in the class and additional topics related to the class.

2.Objective

This assignment will help you to understand conceptsof HDFS and its components.

3.Associated Data Files

No files

4.Problem Statement

1.The \_\_\_\_\_\_\_\_\_\_is the heart of an HDFS file system. It keeps the metadata such as directory tree of all files in

the file system and tracksthe cluster where the file data is

present. The actual data is stored on \_\_\_\_\_\_\_as HDFS blocks.

a)datanode,

datanode

b)resourcemanager,

namenode

c)namenode,

datanode

d)tasktraker,

jobtraker

Answer:Namenode,datanode

2.When the end of the block is reached, \_\_\_\_\_\_\_closes the connection to the datanode,

then finds the best datanode for the next block

.

a)DFSOutputStream

b)client

c)DFSInputStream

d)Resourcemanager

Answer:DFSInputstream

3.When the client finishes reading, it calls

\_\_\_\_method on the closestream.

a)read()

b)write()

c)shuffle

d)close()

Answer:close()

4.Which configuration file contains Environmental variable settings used by Hadoop?

a)Core-site.xml

b)mapred-site.xml

c)yarn-site.xml

d)Hadoop-env.sh

Answer:Hadoop-env.sh

5.Which MapReduce daemon instantiates user code, and executes map and reduce tasks

on a cluster running MapReduce vl (MRvl)?

a)NameNode

b)DataNode

c)JobTracker

d)TaskTracker

Answer:TaskTracker

6.Identify the function performed by the Secondary

NameNode daemon on a cluster configured to run with a single NameNode.

a)In this configuration, the Secondary NameNode performs a checkpoint operation on the files by the NameNode.

b)In this configuration, the Secondary NameNode is standby NameNode, ready to failover and provide high availability.

c)

In this configuration, the Secondary NameNode performs deal

-time backups of the NameNode.

d)

In this configuration, the Secondary NameNode servers as alternate data channel for clients to reach HDFS, should the Name

Node become too busy.

Answer: In this configuration, the Secondary NameNode is standby NameNode, ready to failover and

provide high availability

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7.

Hadoop administrators write

a script called Topology script to determine the rack

location of nodes. It triggers to know the distance of the nodes to replicate the dataand Configures this script in \_\_\_\_\_\_\_\_.

a)yarn-site.xml

b)Hadoop-env.sh

c)core-site.xml

d)mapred-site.env

===============================================Answer:coresite.xml

8.

\_\_\_\_\_\_\_\_\_\_is the master that arbitrates all the available cluster resources and thus

helps manage the distributed applications running on the YARN system

a)

Node manager

b)

data manager

c)

ResourceManager (RM)

d)

Taskmanager

Answer:Resource Manager

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9.

\_\_\_\_\_\_\_\_\_take instructions from the ResourceManager and manage resources available

on a single node.

a)

NodeManagers

b)

data manager

c)

ResourceManager (RM)

d)

Taskmanager

Node manager

10.

How does HDFS Federation help HDFS Scale horizontally?

a)

HDFS Federation improves the resiliency of HDFS in the face of network issues by removing the NameNode as a single

-point-of failure.

b)

HDFS Federation allows the Standby NameNode to automatically resume the services of

an active

NameNode

c)

HDFS Federation provides cross

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data center (non -local) support for HDFS, allowing a

cluster administrator to split the Block Storage outside the local cluster.

d)

e)

HDFS Federation reduces the load on any single NameNode by using the multiple,

independent NameNode to manage individual parts of the

filesystem namespace.

Answer: HDFS Federation allows the Standby NameNode to automatically resume the services of

an active

NameNode

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