**DAC – COS and SDM – Lab Exam – Sep 2023 – Set 2**

Duration: 2 Hours, Marks: 30

**Instructions**

There are **two** questions in the question paper. You need to solve both.

Question 1 carries 10 marks. Question 2 carries 20 marks.

For both the questions, submit code (.java file, Dockerfile, YAML file as appropriate) and/or screenshot of the each step of the output, as appropriate.

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Q.1

(1) Use Linux Shell Script for this. Accept three numbers from the user and print the largest.

=> Total 2 marks. 0.5 marks for each step.

(2) Create a file ‘cdac.txt’ and write 5 lines in it as follows:

Java is great

Scripting is easy

I love Java

Python is good, too

Hello, Java World!

Now count the number of lines that do not contain the word Java using a command.

=> File creation: 0.5 marks, Count: 1.5 marks

(3) Create a directory called one. Create any 2 files in it. Inside one, create another directory called two. Copy the 2 files from directory one to directory two.

=> 3 marks

(4) Find files with the name abc.txt in the current directory or all its subdirectories. (Note: Create such a file before running this command).

=> 3 marks

Q.2

(a) Create a program to initialize a number to some integer value and find its factorial in Java. Execute it.

=> 3 marks

Create a git project to move it to github.

=> 3 marks

Create a Docker container of the code and execute it. Your screenshots should include all the steps related to your Docker work and also attach your Dockerfile.

* Dockerfile: 5 marks, Docker execution: 4 marks

(b)

1. Create a new Test project with require dependencies (Select Simple Maven Project)
2. Write Selenium script to automate the “Yelp Search Scenario”
   1. Navigate to https://www.yelp.com/
   2. Enter Restaurant in search box
   3. Click on search button
   4. Verify the title of result page
3. Create a new Maven project in Jenkins -> Set Root POM as above project’s POM.xml
4. Execute the Jenkins job with Goal: clean Test

Post your Jenkins console output and test.java file as final result.

* 5 marks