**DAC – COS and SDM – Lab Exam – Sep 2023 – Set 3**

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 calculate and display its average.

=> 3 marks

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

Bash scripting lets you automate repetitive tasks

Bash scripting is incredibly versatile

Fascinating world of Bash scripting

Count number of charactes, words, lines in the file using a command.

=> 3 marks

(3) Create a file "cdac.jsp". Change its permissions so that only the owner can make changes to it.

=> 2 marks

(4) Add a new user cdac and change the owner of the above file to cdac user.

=> 2 marks

Q.2

(a) Create a program to initialize a number to some integer value and find sum of its digits 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, Execution: 4 marks

(b)

1. Create a new Test project with require dependencies (Select Simple Maven Project)
2. Write Selenium script to automate the “Practice Login scenario”
   1. Navigate to https://practice.automationtesting.in/my-account/
   2. Enter first name, last name and click on Login
   3. Verify the error message
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