

DAC – COS and SDM – Lab Exam – Sep 2023 – Set 4

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.

Q. 1

(1) Use Linux Shell Script for this. Accept Sales and Cost from the user. Calculate Profit = Sales – Cost. Subtract 10% from Profit as Taxes. Display final amount as Net Profit.

(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

Use commands for this: Display lines between 1 and 3. Append a new line 'Hello there' after line 2.

=> File creation: 1 mark, Commands: 3 marks

(3) Create a new directory 'one' and create any two files in that directory. Inside directory one, create directory 'two' and repeat the process. Inside directory two, create directory 'three' and repeat the process. Now go to directory 'one' and remove everything under it.

=> 3 marks.

(4) Add a new user cdac and remove the user.

=> 3 marks.

Q.2

(a) Create a program to initialize a number to some integer value and reverse 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"
 - a. Navigate to <https://mail.rediff.com/cgi-bin/login.cgi>
 - b. Enter Username, password and click on Login
 - c. 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