

Assisted Practice 12.3: Inheritance

Problem Scenario: Write a program to demonstrate inheritance using classes, objects, and methods.

Objective: In this demonstration, we will learn how to work with inheritance.

Expected Output:

Friend1 name is: Jenny

Friend2 name is: Adam

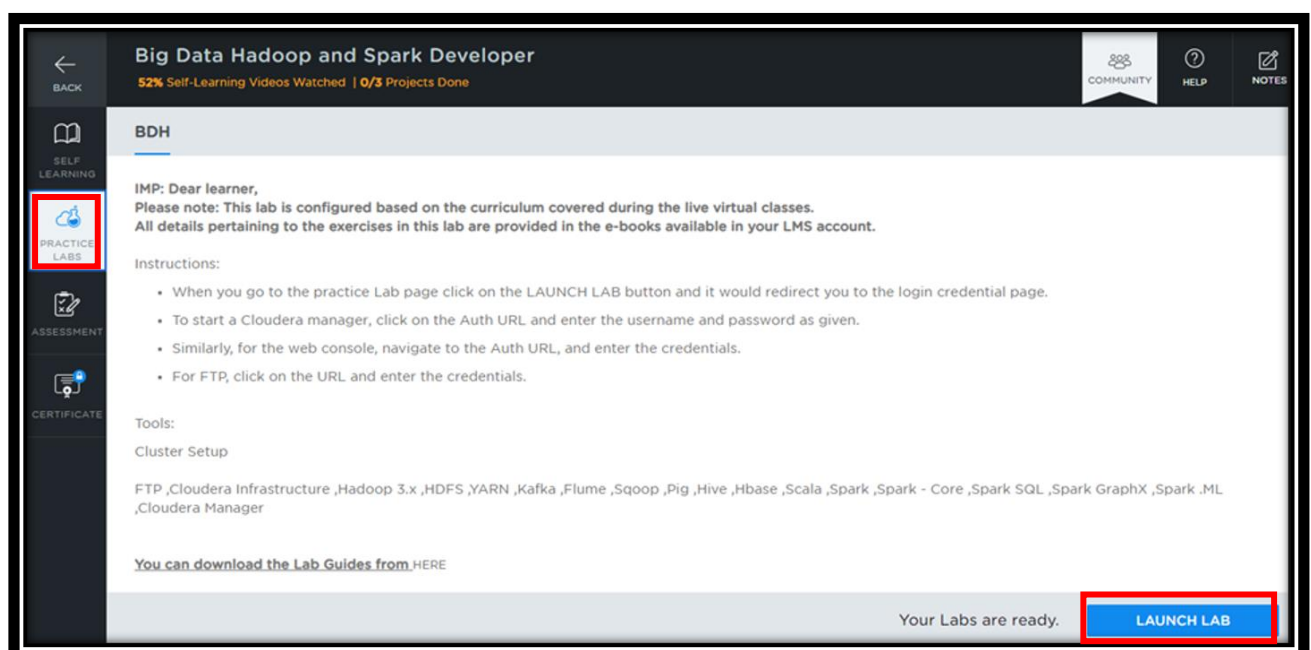
Steps to Perform:

Step 1: Log in to your LMS account

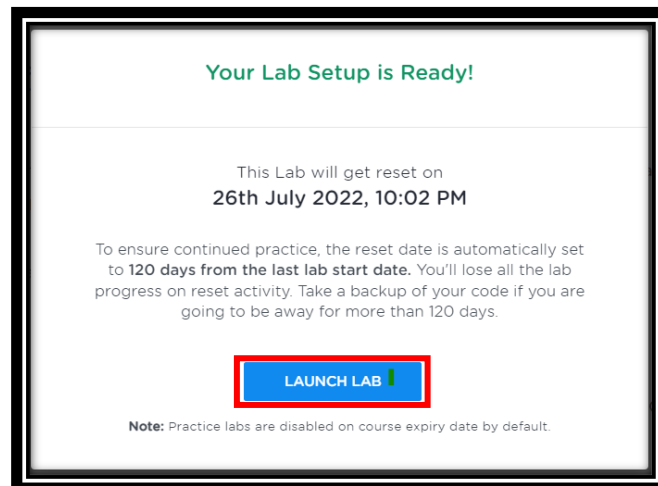
Step 2: Open the course “**Big data Hadoop and Spark developer**”

(Note: The course name reflects depending on the program purchased.)

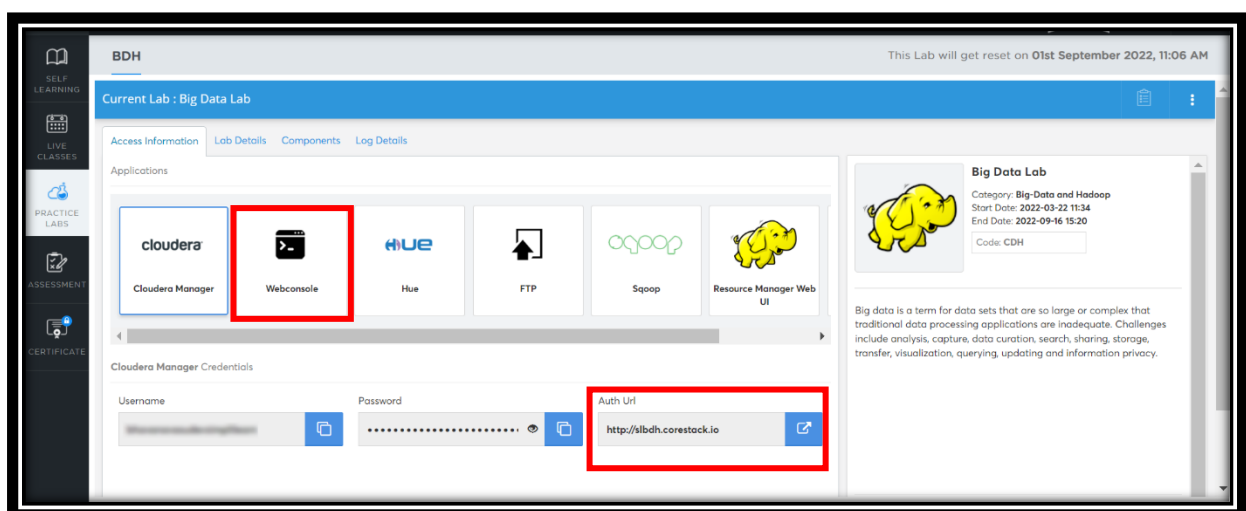
Step 3: On the left side, click on the “**PRACTICE LABS**” tab and click on the “**LAUNCH LAB**” button



Step 4: Again, click on the “**LAUNCH LAB**” button



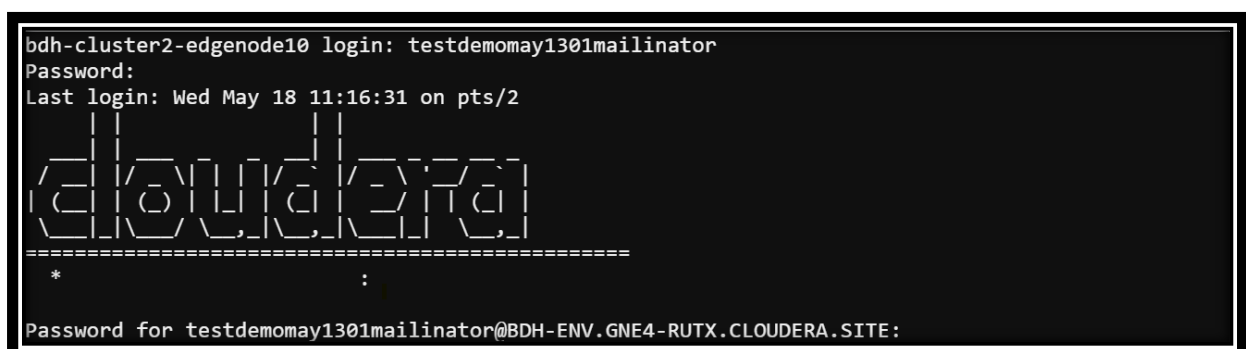
STEP 5: Click on **“Webconsole”** and click on the **“Auth Url”**



Step 6: Copy the **“Username”** and the **“Password”** provided to log in to the Web console

Step 7: Paste the **“Username”** and the **“Password”** on the console and click on Enter

Note: The password will not be visible when pasted on the console.



Step 8: Create a python file

Command:

```
vi inhertance.py
```

The below screen appears:

**Step 9:** Perform the tasks

- 9.1 Create two base classes with the names friend1 and friend2 respectively

Command:

```
class Friend1:

    friend1name = ""

    def friend1Name(self):

        print("Hey I am friend1, and my name is: ",self.friend1name)

class Friend2:

    friend2name = ""

    def friend2(self):

        print("Hey I am friend2, and my name is: ",self.friend2name)
```

- 9.2 Create a derived class with the name friend3

Command:

```
class Friend3(Friend2,Friend1):  
  
    def Friends(self):  
  
        print("Friend1  name is :", self.friend1name)  
  
        print("Friend2  name is :", self.friend2name)
```

- 9.3 Create the objects of the derived class and retrieve the attributes of the base class

Command:

```
obj = Friend3()  
  
obj.friend1name = "Jenny"  
  
obj.friend2name = "Adam"  
  
obj.Friends()
```

```
class Friend1:  
    friend1name = ""  
    def friend1Name(self):  
        print("Hey I am friend1, and my name is : ",self.friend1name)  
  
class Friend2:  
    friend2name = ""  
    def friend2(self):  
        print("Hey I am friend2, and my name is : ",self.friend2name)  
  
class Friend3(Friend2,Friend1):  
    def Friends(self):  
        print("Friend1  name is :", self.friend1name)  
        print("Friend2  name is :", self.friend2name)  
  
obj = Friend3()  
obj.friend1name = "Jenny"  
obj.friend2name = "Adam"  
obj.Friends()  
~
```

9.4 Run the Python script to check the output

Command:

```
python3 inheritance.py
```

```
[testdemomay1301mailinator@bdh-cluster2-edgenode10 ~]$ python3 inheritance.py
Friend1 name is : Jenny
Friend2 name is : Adam
[testdemomay1301mailinator@bdh-cluster2-edgenode10 ~]$
```