Assisted Practice 12.6: Polymorphism

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

Objective: In this demonstration, we will learn how to perform polymorphism.

Expected Output:

Employee ID of employee1 is: 2428

Employee 1 name is: Leonard

Employee ID of employee1 is: 2429

Employee 2 name is: Sheldon

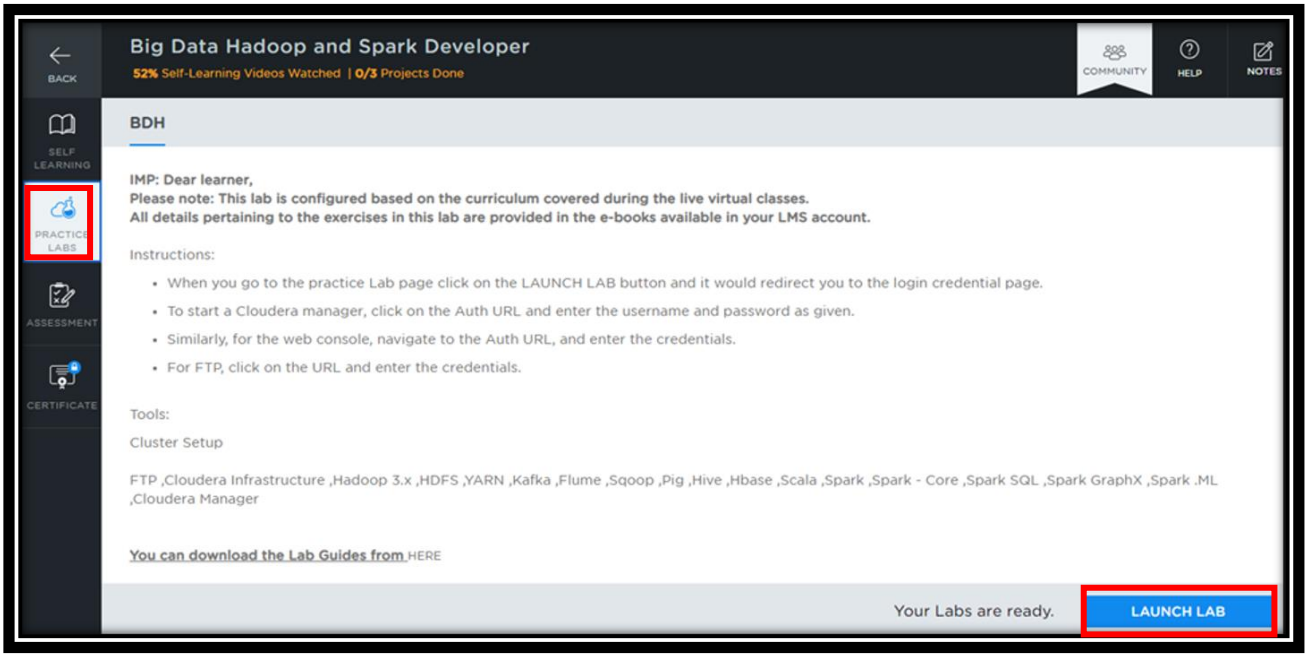
Steps to Perform:

Step 1: Log in to your LMS account.

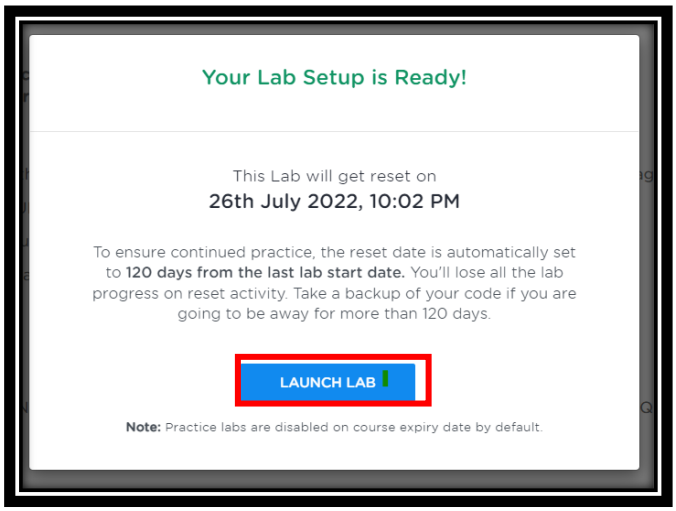
Step 2: Open the course "**Big data Hadoop and Spark developer**".

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

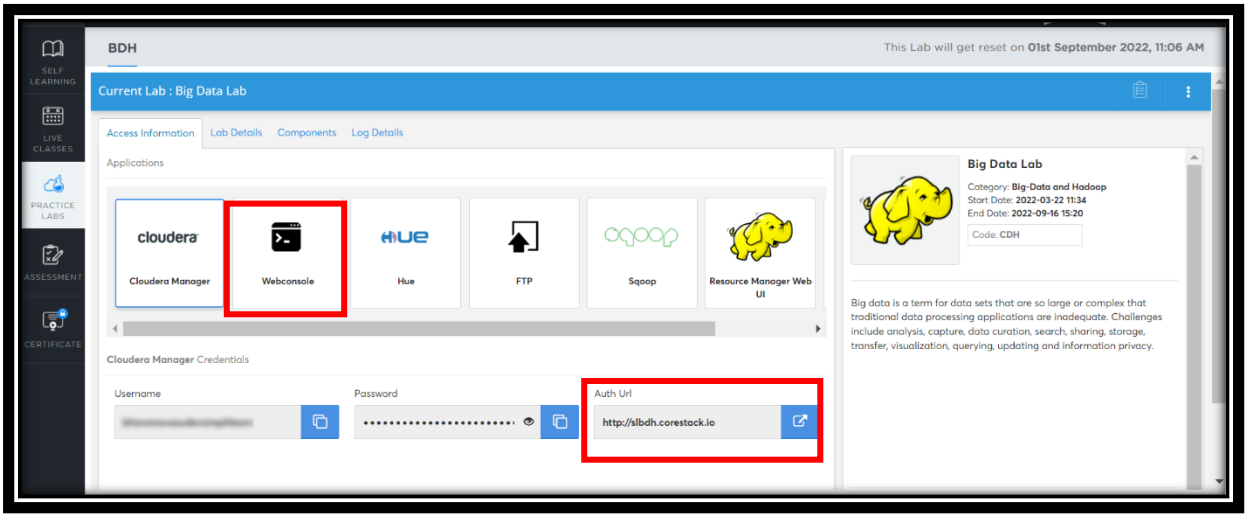
Step 3: On the left side, click on the "**PRACTICE LABS**" tab and click on the "**LAUNCH LAB**" button.



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.

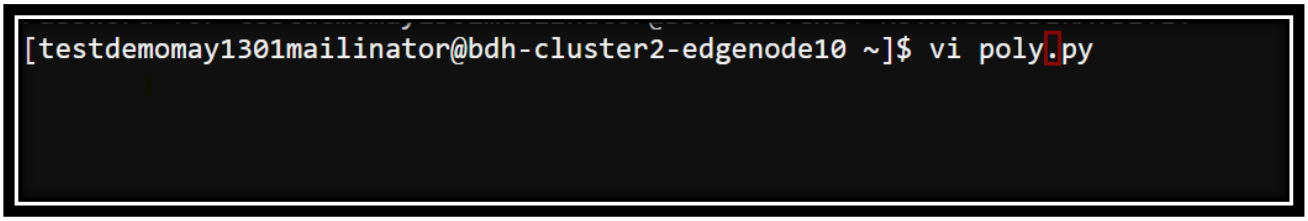
Step 7: Paste the "**Username**" and the "**Password**" on the console and click on enter.

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

Step 8: Create a python file

Command:

vi poly.py



The below screen appears:

Step 9: Perform the tasks.

9.1 Create two classes with the names employee1 and employee2 that contain the same method names.

Command:

```
class Employee1():
  def EmployeeId(self):
   print("Employee ID of employee1 is: 2428 .")
  def Name(self):
   print("Employee 1 name is : Leonard")
class Employee2():
  def EmployeeId(self):
   print("Employee ID of employee1 is: 2429")
   def Name(self):
   print("Employee 2 name is : Sheldon")
```

9.2 Create the objects of the base class and call the methods.

Command:

```
obj_employee1 = Employee1()

obj_employee2 = Employee2()

for i in (obj_employee1 , obj_employee2):

 i.EmployeeId()

 i.Name()
```

```
class Employee1():
  def EmployeeId(self):
    print("Employee ID of employee1 is: 2428")
  def Name(self):
    print("Employee 1 name is : Leonard")

class Employee2():
  def EmployeeId(self):
   print("Employee ID of employee1 is: 2429")
  def Name(self):
   print("Employee 2 name is : Sheldon")

obj_employee1 = Employee1()
obj_employee2 = Employee2()

for i in (obj_employee1 , obj_employee2):
  i.EmployeeId()
  i.Name()

~
~
```

9.3 Run the code.

Command:

```
python3 poly.py
```

```
[testdemomay1301mailinator@bdh-cluster2-edgenode10 ~]$ python3 poly.py
Employee ID of employee1 is: 2428
Employee 1 name is : Leonard
Employee ID of employee1 is: 2429
Employee 2 name is : Sheldon
```