Practical 12
(Write a python program to show the need of inheritance and encapsulation)

Create a base class named university with its attributes - name, year_of_estd, and city. Derive following class from the super class university: professor, lab_assistant, office_assistant, and peon. Make the program choice based on the user. The attributes and method of various class are as below: -

Attributes of professor class: designation, highest_qualification, area_of_research, year_of_joining, year_of_ experience, and name_of_institute. - Methods of professor class: __init__() method that gets invoked upon instantiation and takes values of class attributes. The display() method that prints class attribute values along with attributes of its super class. –

Attributes of lab_assistant class: designation = "Lab Assistant" (static), highest_qualification, additiobnal_skilss, year_of_joining, and name_of_institue. 04/04/2022 - Methods of lab_assistant class: __init__() method that gets invoked upon instantiation and takes values of class attributes. The display() method that prints class attribute values along with attributes of its super class. –

Attributes of office_assistant class: designation = "Office Assistant" (static), highest_qualification, year_of_joining, and name_of_institute. - Methods of office_assistant class: __init__() method that gets invoked upon instantiation and takes values of class attributes. The display() method that prints class attribute values along with attributes of its super class. –

Attributes of peon class: job_role = "office Peon" (static), qualification, year_of_joining, and name_of_institute. - Methods of peon class: __init__() method that gets invoked upon instantiation and takes values of class attributes. The display() method that prints class attribute values along with attributes of its super class.