**Lab\_06:**

class Course:

def \_\_init\_\_(self, course\_code, course\_name):

self.course\_code = course\_code

self.course\_name = course\_name

def display\_info(self):

print(f"Course Code: {self.course\_code}\nCourse Name: {self.course\_name}")

class UndergraduateCourse(Course):

def \_\_init\_\_(self, course\_code, course\_name, year\_level):

super().\_\_init\_\_(course\_code, course\_name)

self.year\_level = year\_level

def additional\_info(self):

print(f"Year Level: {self.year\_level}")

class GraduateCourse(UndergraduateCourse):

def \_\_init\_\_(self, course\_code, course\_name, research\_area):

super().\_\_init\_\_(course\_code, course\_name)

self.research\_area = research\_area

def additional\_info(self):

print(f"Research Area: {self.research\_area}")

def register\_course():

course\_code = input("Enter course code: ")

course\_name = input("Enter course name: ")

course\_type = input("Enter course type (undergraduate or graduate): ").lower()

if course\_type == "undergraduate":

year\_level = input("Enter year level: ")

course = UndergraduateCourse(course\_code, course\_name, year\_level)

elif course\_type == "graduate":

research\_area = input("Enter research area: ")

course = GraduateCourse(course\_code, course\_name, research\_area)

else:

print("Invalid course type.")

print("Course Registered Successfully!")

print("Course Information:")

course.display\_info()

course.additional\_info()

register\_course()s