# Combined Code for Question 1 and Question 2

# -------- Question 1: University Course Catalog --------

class Course:

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

self.course\_code = course\_code

self.course\_name = course\_name

self.credit\_hours = credit\_hours

def display(self):

print(f"Code: {self.course\_code}, Name: {self.course\_name}, Credits: {self.credit\_hours}")

class CoreCourse(Course):

def \_\_init\_\_(self, course\_code, course\_name, credit\_hours, required\_for\_major):

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

self.required\_for\_major = required\_for\_major

def display(self):

super().display()

print(f"Required for Major: {'Yes' if self.required\_for\_major else 'No'}")

class ElectiveCourse(Course):

def \_\_init\_\_(self, course\_code, course\_name, credit\_hours, elective\_type):

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

self.elective\_type = elective\_type

def display(self):

super().display()

print(f"Elective Type: {self.elective\_type}")

# -------- Question 2: Employee Management --------

class Employee:

def \_\_init\_\_(self, name, salary):

self.name = name

self.salary = salary

def get\_name(self):

return self.name

def get\_salary(self):

return self.salary

# -------- Main Execution --------

if \_\_name\_\_ == "\_\_main\_\_":

# Testing Question 1

print("=== Core Course ===")

core = CoreCourse("CS101", "Intro to CS", 3, True)

core.display()

print("\n=== Elective Course ===")

elective = ElectiveCourse("SESC202", "Social Science", 2, "Economics")

elective.display()

# Testing Question 2

print("\n=== Employee Details ===")

emp = Employee("Robert", 40000)

print("Employee Name:", emp.get\_name())

print("Employee Salary:", emp.get\_salary())