

Classroom Assignment <15>: Multilevel Inheritance

Learning Objective:

Understand **multilevel inheritance** through a hierarchy of roles in an organization.

Expected Completion Time:

Best Case: 20 minutes

Average Case: 25 minutes

Assignment Details:

Create three classes:

1. `Person` → Base class with attribute `name`.
2. `Employee` → Inherits from `Person`, adds `employee_id`.
3. `Manager` → Inherits from `Employee`, adds `team_size` and method `show_details()`.

Requirements:

- Create `Person` with `__init__()` to store `name`.
- Create `Employee` extending `Person` with `employee_id`.
- Create `Manager` extending `Employee` with `team_size`.
- Demonstrate by creating a `Manager` object and printing all attributes.

Hints to Solve:

- Pass parameters through constructors using `super()`.
- Use method `show_details()` to display all details.

Expected Outcome:

- Understand how information flows through **multiple levels of inheritance**.