1,

Def longest\_common\_prefix(strings):

If not strings:

Return “”

Prefix = “”

For chars in zip(\*strings):

If len(set(chars)) == 1:

Prefix += chars[0]

Else:

Break

Return prefix

Words = (“Flower”, “Flow”, “Flight”)

Print(longest\_common\_prefix(words))

2,

Class Person:

Def \_\_init\_\_(self, name, age):

Self.name = name

Self.age = age

Def display\_info(self):

Print(f”Name: {self.name}, Age: {self.age}”)

Class Student(Person):

Def \_\_init\_\_(self, name, age, student\_id, course):

Person.\_\_init\_\_(self, name, age)

Self.student\_id = student\_id

Self.course = course

Def display\_student\_details(self):

Self.display\_info()

Print(f”Student ID: {self.student\_id}, Course: {self.course}”)

Person1 = Person(“Alice”, 30)

Student1 = Student(“Bob”, 20, “S1234”, “Computer Science”)

Person1.display\_info()

Print()

Student1.display\_student\_details()