class VirtualWorld:

def \_\_init\_\_(self):

self.users = []

def add\_user(self, user):

self.users.append(user)

def remove\_user(self, user):

self.users.remove(user)

def broadcast\_message(self, message):

for user in self.users:

user.receive\_message(message)

class User:

def \_\_init\_\_(self, username):

self.username = username

def send\_message(self, message, virtual\_world):

virtual\_world.broadcast\_message(f"{self.username}: {message}")

def receive\_message(self, message):

print(f"{message}")

# Example usage:

world = VirtualWorld()

user1 = User("Alice")

user2 = User("Bob")

user3 = User("Charlie")

world.add\_user(user1)

world.add\_user(user2)

world.add\_user(user3)

user1.send\_message("Hello everyone!", world)

user2.send\_message("Hi Alice and Charlie!", world)

world.remove\_user(user3)

user1.send\_message("Goodbye Charlie!", world)