class Room:

def \_\_init\_\_(self, room\_number, room\_type, is\_available = True):

self.room\_number = room\_number

self.room\_type = room\_type

self.is\_available = is\_available

def to\_string(self):

availability = "可用" if self.is\_available else "已占用"

return f"房间号: {self.room\_number}, 类型: {self.room\_type}, 状态: {availability}"

# 酒店管理系统类

class HotelManagementSystem:

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

self.rooms = []

def add\_room(self, room):

self.rooms.append(room)

def remove\_room(self, room\_number):

for room in self.rooms:

if room.room\_number == room\_number:

self.rooms.remove(room)

return True

return False

def list\_rooms(self):

for room in self.rooms:

print(room.to\_string())

# 示例用法

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

hotel\_system = HotelManagementSystem()

room1 = Room(101, "标准间")

room2 = Room(102, "单人间")

hotel\_system.add\_room(room1)

hotel\_system.add\_room(room2)

hotel\_system.list\_rooms()

hotel\_system.remove\_room(101)

print("删除房间101后:")

hotel\_system.list\_rooms()