1.

def create\_product(price, name):

return {"price": price, "name": name}

def arrange\_packets(packet1, packet2):

shelf = []

def insert\_product(product):

index = 0

while index < len(shelf) and shelf[index]["price"] <= product["price"]:

index += 1

shelf.insert(index, product)

def print\_shelf():

for i, product in enumerate(shelf):

print(f"Product {i+1}: {product['name']} - ${product['price']}")

for packet in [packet1, packet2]:

for item in packet:

price, name = item

product = create\_product(price, name)

insert\_product(product)

print\_shelf()

packet1 = [(15, "P1 Product"), (20, "P2 Product")]

packet2 = [(13, "P3 Product"), (6, "P4 Product")]

arrange\_packets(packet1, packet2)

Result:

Product 1: P4 Product - $6

Product 2: P3 Product - $13

Product 3: P1 Product - $15

Product 4: P2 Product - $20

2.

def search\_tomatoes(refrigerator):

for item in refrigerator:

if item.lower() == "tomato":

return True

return False

refrigerator = ["milk", "eggs", "cheese", "tomato", "lettuce"]

if search\_tomatoes(refrigerator):

print("Tomatoes are found in the refrigerator.")

else:

print("Tomatoes are not found in the refrigerator.")

**Output:**

Tomatoes are found in the refrigerator.