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# Install fuzzywuzzy
!pip install fuzzywuzzy[speedup]

# Imports
from fuzzywuzzy import process

# Core product and order data
products = {
    "iphone 14": {
        "category": "Smartphones",
        "brand": "Apple",
        "stock": 12,
        "price": "₹79,990",
        "specs": "128GB, Midnight",
        "rating": 4.5,
        "features": ["OLED Display", "A15 Bionic Chip", "5G Connectivity", "Ceramic Shield",
        "color_options": ["Midnight", "Starlight", "Blue", "Red", "Green"]
    },
    "samsung galaxy s23": {
        "category": "Smartphones",
        "brand": "Samsung",
        "stock": 8,
        "price": "₹74,999",
        "specs": "256GB, Phantom Black",
        "rating": 4.7,
        "features": ["120Hz Dynamic AMOLED", "Exynos 2200", "5G Connectivity", "S Pen"],
        "color_options": ["Phantom Black", "Green", "Cream", "Lavender"]
    },
    "sony headphones": {
        "category": "Audio",
        "brand": "Sony",
        "stock": 25,
        "price": "₹7,499",
        "specs": "WH-CH720N, Noise Cancelling",
        "rating": 4.3,
        "features": ["Noise Cancellation", "30 Hours Playback", "Bluetooth 5.0", "Comfortab
        "color_options": ["Black", "White"]
    },
    "boat earbuds": {
        "category": "Audio",
        "brand": "Boat",
        "stock": 50,
        "price": "₹1,299",
        "specs": "Airdopes 161, Bluetooth 5.1",
        "rating": 4.0,
        "features": ["IPX4 Water Resistant", "25 Hours Playback", "Bluetooth 5.1", "Touch C
        "color_options": ["Black", "White", "Blue", "Red"]
    },
    "dell xps laptop": {
        "category": "Laptops",
        "brand": "Dell",
        "stock": 4,
        "price": "₹1,14,999",
        "specs": "13-inch, i7, 16GB RAM",
        "rating": 4.6,
        "features": ["Intel Core i7", "16GB RAM", "512GB SSD", "FHD Display", "Thunderbolt
        "color_options": ["Platinum Silver", "Frost White"]
    },
    "realme narzo 60x": {
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        "category": "Smartphones",
        "brand": "Realme",
        "stock": 19,
        "price": "₹11,999",
        "specs": "6GB RAM, 128GB",
        "rating": 4.2,
        "features": ["90Hz Display", "MediaTek Dimensity 810", "50MP Camera", "5000mAh Batt",
        "color_options": ["Black", "Blue", "Grey"]
    },
    "hp pavilion gaming laptop": {
        "category": "Laptops",
        "brand": "HP",
        "stock": 15,
        "price": "₹74,990",
        "specs": "15.6-inch, Ryzen 5, 8GB RAM, GTX 1650",
        "rating": 4.4,
        "features": ["AMD Ryzen 5", "GTX 1650 GPU", "144Hz Display", "1TB HDD + 512GB SSD"]
        "color_options": ["Shadow Black"]
    },
    "xiaomi mi tv 4k": {
        "category": "Electronics",
        "brand": "Xiaomi",
        "stock": 30,
        "price": "₹49,999",
        "specs": "55-inch, 4K UHD, Android TV",
        "rating": 4.3,
        "features": ["4K UHD", "Dolby Vision", "HDR 10+", "Android TV", "Chromecast Built-i",
        "color_options": ["Black"]
    },
    "fitbit charge 5": {
        "category": "Wearables",
        "brand": "Fitbit",
        "stock": 50,
        "price": "₹14,999",
        "specs": "Fitness Tracker with Heart Rate Monitor",
        "rating": 4.5,
        "features": ["Built-in GPS", "Sleep Tracking", "Stress Management", "Heart Rate Mon",
        "color_options": ["Black", "Lunar White", "Steel Blue"]
    }
}

orders = {
    "12345": {
        "status": "Shipped",
        "shipping_method": "BlueDart",
        "expected_delivery": "13th May",
        "tracking_number": "BDE123456789",
        "shipping_address": "123, MG Road, Bangalore",
        "payment_status": "Paid",
        "total_amount": "₹79,990"
    },
    "23456": {
        "status": "Out for delivery",
        "shipping_method": "BlueDart",
        "expected_delivery": "Today",
        "tracking_number": "BDE234567890",
        "shipping_address": "456, Kormangala, Bangalore",
        "payment_status": "Paid",
        "total_amount": "₹74,999"
    }
},

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"34567": {
    "status": "Delivered",
    "delivery_date": "10th May",
    "shipping_method": "BlueDart",
    "tracking_number": "BDE345678901",
    "shipping_address": "789, Indiranagar, Bangalore",
    "payment_status": "Paid",
    "total_amount": "₹7,499"
},
"98765": {
    "status": "Order confirmed",
    "shipping_method": "BlueDart",
    "expected_delivery": "15th May",
    "tracking_number": "BDE987654321",
    "shipping_address": "102, HSR Layout, Bangalore",
    "payment_status": "Pending",
    "total_amount": "₹1,14,999"
},
"54321": {
    "status": "Pending payment confirmation",
    "shipping_method": "BlueDart",
    "expected_delivery": "Not yet shipped",
    "tracking_number": None,
    "shipping_address": "98, Whitefield, Bangalore",
    "payment_status": "Pending",
    "total_amount": "₹11,999"
},
"87654": {
    "status": "Shipped",
    "shipping_method": "DTDC",
    "expected_delivery": "14th May",
    "tracking_number": "DTDC876543210",
    "shipping_address": "202, Koramangala, Bangalore",
    "payment_status": "Paid",
    "total_amount": "₹1,299"
}
}

# Memory to store last mentioned product or order
memory = {
    "last_product": None,
    "last_order": None,
}

# Chatbot function with context memory
def chatbot(user_input):
    user_input = user_input.lower()

    # ✅ Basic greetings
    greetings = ["hi", "hello", "hey", "good morning", "good evening", "how are you"]
    if any(greet in user_input for greet in greetings):
        return "👋 Hello! How can I help you today?"

    # ✅ Fuzzy match product names
    best_match, score = process.extractOne(user_input, products.keys())
    if score > 70:
        details = products[best_match]
        memory["last_product"] = best_match # Store the last mentioned product
        return f"✅ {best_match.title()} is available!\n- Price: {details['price']}\n- Spec

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# ✅ If user just says "order" but no ID
if "order" in user_input and not any(char.isdigit() for char in user_input):
    return "📦 Please provide your order number to check the status. Example: 'Track or

# ✅ Order tracking with number
if "order" in user_input and any(char.isdigit() for char in user_input):
    order_input = user_input.replace('#', '') # Remove '#' if it's there

    for order_id in orders:
        if order_id in order_input:
            memory["last_order"] = order_id # Store the last mentioned order
            return f"📦 Order #{order_id} status:\n{orders[order_id]}"
    return "❌ Sorry, we couldn't find that order ID. Please check and try again."

# ✅ If user asks about the last product or order
if "last product" in user_input and memory["last_product"]:
    product = memory["last_product"]
    details = products[product]
    return f"✅ Last product: {product.title()}\n- Price: {details['price']}\n- Specs:

if "last order" in user_input and memory["last_order"]:
    order_id = memory["last_order"]
    return f"📦 Last order #{order_id} status:\n{orders[order_id]}"

# ✅ Returns and refunds
if "return" in user_input or "refund" in user_input:
    return ("🔄 Return/Refund Policy:\n- Items can be returned within 7 days of deliver
        "- Refunds are processed within 5 business days after pickup.")

# ✅ Account help
if "password" in user_input or "account" in user_input:
    return ("👤 Account Assistance:\n- To reset your password, visit the login page and
        "- For other account issues, please contact support.")

# ✅ FAQs
if "delivery" in user_input:
    return "🚚 Delivery typically takes 2-5 business days depending on your location."

if "payment options" in user_input or "payment" in user_input:
    return "💰 We accept UPI, Credit/Debit cards, Net Banking, and Cash on Delivery (CO

# ✅ Fallback
return "🤖 I'm not sure how to help with that. Would you like to talk to a human agent?"

# Run the chatbot
print("Welcome to the E-Commerce Support Bot! Type 'exit' to quit.\n")

while True:
    user_input = input("You: ")
    if user_input.lower() in ["exit", "quit"]:
        print("Bot: Thank you! Have a great day!")
        break
    response = chatbot(user_input)
    print("Bot:", response)

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Collecting fuzzywuzzy[speedup]

Downloading fuzzywuzzy-0.18.0-py2.py3-none-any.whl.metadata (4.9 kB)

Collecting python-Levenshtein>=0.12 (from fuzzywuzzy[speedup])

Downloading python-Levenshtein-0.27.1-py3-none-any.whl.metadata (3.7 kB)

Collecting Levenshtein==0.27.1 (from python-Levenshtein>=0.12->fuzzywuzzy[speedu

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Downloading levenshtein-0.27.1-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (161.7 kB)
Collecting rapidfuzz<4.0.0,>=3.9.0 (from Levenshtein==0.27.1->python-Levenshtein)
Downloading rapidfuzz-3.13.0-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (3.1 MB)
Downloading python-Levenshtein-0.27.1-py3-none-any.whl (9.4 kB)
Downloading levenshtein-0.27.1-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (161.7/161.7 kB 3.0 MB/s eta 0:00)
Downloading fuzzywuzzy-0.18.0-py2.py3-none-any.whl (18 kB)
Downloading rapidfuzz-3.13.0-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (3.1/3.1 MB 10.2 MB/s eta 0:00)
Installing collected packages: fuzzywuzzy, rapidfuzz, Levenshtein, python-Levenshtein
Successfully installed Levenshtein-0.27.1 fuzzywuzzy-0.18.0 python-Levenshtein-0.27.1
Welcome to the E-Commerce Support Bot! Type 'exit' to quit.
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