# Define the Colors collection

Colors = ['Red', 'Green', 'Blue']

# Define predicates

def Likes(x, y):

return (x == 'Alice' and y == 'Green') or \

(x == 'Bob' and y == 'Red') or \

(x == 'Charlie' and y == 'Blue')

def FavoriteColor(x, c):

return Likes(x, c)

# User input for queries

person = input("Enter a person's name (Alice, Bob, Charlie): ")

color = input("Enter a color (Red, Green, Blue): ")

# Check if the person likes the color

print(f"Does {person} like the color {color}?", Likes(person, color))

# Find the person's favorite color

favorite\_color = next((c for c in Colors if FavoriteColor(person, c)), None)

print(f"What is {person}'s favorite color?", favorite\_color)

Output:

Enter a person's name (Alice, Bob, Charlie): Alice

Enter a color (Red, Green, Blue): Green

Does Alice like the color Green? True

What is Alice's favorite color? Green