```python
# Dictionary storing population data (in millions)
popData = {
    'CA': 39.5, 'TX': 30.0, 'FL': 22.2, 'NY': 19.8, 'PA': 13.0,
    'IL': 12.8, 'OH': 11.8, 'GA': 10.9, 'NC': 10.7, 'MI': 10.1,
    'US': 339.0, 'MX': 126.7, 'BR': 203.1, 'UK': 67.7, 'FR': 65.6,
    'DE': 83.2, 'JP': 125.4, 'IN': 1428.6, 'CN': 1411.8,
    'NG': 216.7, 'ZA': 60.4, 'AU': 26.4
}

# Function to retrieve population based on region code
def retrieve_pop(region_code, data_dict):
    # Check if region_code exists in dictionary
    if region_code in data_dict:
        return data_dict[region_code]
    else:
        return None

# Main function to handle user input and control flow
def main():
    # Store all valid country codes in a list
    valid_codes = list(popData.keys())

    while True:
        # Prompt user for input and normalize it
        user_input = input("Please enter a country code: ").strip().upper()

        # Retrieve population using the function
        population = retrieve_pop(user_input, popData)

        if population is not None:
            # Display result using f-string
            print(f"{user_input} population = {population}")
            break  # Exit loop after successful lookup
        else:
            # Display error and valid codes
            print(f"Error: '{user_input}' not recognized. Valid codes: {', '.join(valid_codes)}")
            retry = input("Would you like to try again? (yes/no): ").strip().lower()
            if retry not in ['yes', 'y']:
                print("Program terminated.")
                break

# Call the main function
main()
```