```
START

import requests
import matplotlib.pyplot as plt

def get_valid_currency_code(prompt, symbols):
    while True:
        currency_code = input(prompt).upper()
        if currency_code in symbols:
            return currency_code
        else:
            print("Invalid currency code. Please enter a valid code.")

def get_valid_amount():
    while True:
        try:
            amount = float(input("Enter the amount: "))
            if amount

= 0:
    print("Amount must be greater than 0.")
else:
    return amount
except ValueError:
    print("Amount must be a numeric value.")

def fetch_currency_symbols(apikey):
    url = "https://api.apilayer.com/fixer/symbols"
    headers =

apikey

response = requests.get(url, headers=headers)
```

response.status_code != 200:
print(f"Failed to fetch currency symbols. Status code:

— **True** / **False**

```
symbols_data = response.json()
return symbols_data.get("symbols",

).keys()

def convert_currency(init_currency, target_currency, amount, apikey):
    url = f"https://api.apilayer.com/fixer/convert?to=

target_currency

response = requests.get(url, headers=headers)
```

response.status_code != 200:
print(f"Sorry, there was a problem. Status code:

— **True** / **False**

```
response.status_code

result = response.json()
if 'result' not in result:
    print(f"Error in API response:

result.get('error', 'Unknown error')

def display_conversion_graph(init_currency, target_currency, amount, converted_amount):
    labels = [init_currency, target_currency]
    values =
```

amount, converted_amount

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plt.bar(labels, values, color=['blue', 'green'])
plt.xlabel('Currency')
plt.ylabel('Amount')
plt.title('Currency Conversion')
plt.show()
```

name == "**main**":
apikey = "xczqFWwhlZluKNhVXK2KD2ol8H55Vujw"

— **True** / **False**

```
symbols = fetch_currency_symbols(apikey)

print("Commonly used currency codes for suggestions:", ", ".join(symbols))

init_currency = get_valid_currency_code("Enter an initial currency: ", symbols)

target_currency = get_valid_currency_code("Enter a target currency: ", symbols)

amount = get_valid_amount()

converted_amount = convert_currency(init_currency, target_currency, amount, apikey)

print(f'

display_conversion_graph(init_currency, target_currency, amount, converted_amount)

END
```