# Currency Converter Project

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## Description

This project implements a Currency Converter using Python.   
It allows users to input an amount, source currency, and target currency, and performs the conversion based on real-time exchange rates fetched from an online API.

## Project Features

* - Input amount and source currency.
* - Input target currency.
* - Fetch real-time exchange rates using an API.
* - Convert the amount and display the result.
* - Optional: Add a graphical user interface using tkinter.

## Code Snippets

1. 1. Fetch Exchange Rates:

import requests  
  
def get\_exchange\_rate(source\_currency, target\_currency):  
 api\_url = f"https://v6.exchangerate-api.com/v6/YOUR\_API\_KEY/latest/{source\_currency}"  
 response = requests.get(api\_url)  
 if response.status\_code == 200:  
 rates = response.json()['conversion\_rates']  
 return rates.get(target\_currency)  
 else:  
 print("Error fetching exchange rates")  
 return None

1. 2. Conversion Function:

def convert\_currency(amount, source\_currency, target\_currency):  
 rate = get\_exchange\_rate(source\_currency, target\_currency)  
 if rate:  
 return amount \* rate  
 else:  
 return None

1. 3. Command-Line Interface:

def main():  
 print("Welcome to the Currency Converter!")  
 amount = float(input("Enter the amount: "))  
 source\_currency = input("Enter the source currency (e.g., USD): ").upper()  
 target\_currency = input("Enter the target currency (e.g., EUR): ").upper()  
   
 converted\_amount = convert\_currency(amount, source\_currency, target\_currency)  
   
 if converted\_amount:  
 print(f"{amount} {source\_currency} = {converted\_amount:.2f} {target\_currency}")  
 else:  
 print("Conversion failed. Please check the currency codes or try again.")  
   
if \_\_name\_\_ == "\_\_main\_\_":  
 main()