∨ Python Project title :

CURRENCY CONVERTER

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Currency Converter Link: Currency Converter link = https://colab.research.google.com/drive/16C3Qjtr2Yc0pC4miPYAVzZ3gidtlkUrp?usp=sharing

This project is a personal currency conversion assistant, built in Python! It lets you easily switch between rupees and various foreign currencies, based on average exchange rates over the past year(2023)

Imagine needing to know how much your euros are worth in rupees, or vice versa.

Here's how it works:

- We've built a special dictionary containing average exchange rates for different currencies against the Indian rupee.
- Each currency code is the key (like USD or EUR), and the value tells you how much one unit of that currency is worth in rupees.
- Simply tell the program , It Easily convert both INR to other currencies and other currencies to INR

Calculating Average Annual values and updating the Dictionary

```python
in_INR=dict()

#__USD(US doller)
x=(71.292754+71.591709 +74.530504 +76.363162 +75.738408 +75.813622 +74.662162 +73.565027 +73.565448 +74.265062 +73.739563)/12
# print(x)
in_INR['USD']=x

#___EUR(euro)
y=(88.142064+88.464157+88.050487+89.964055+89.554082+89.077750+90.842440+90.406121+88.708572+87.943062+90.004112+90.877101)/12
# print(y)
in_INR['EUR']=y

#____AUD(australian doller)
AUD=(56.801195+56.958068+54.937272+54.818925+54.670051+55.175793+55.285156+53.729109+53.326482+52.851395+54.043809+55.738882)/12
# print(AUD)
in_INR['AUD']=AUD

#____GBP(british pound)
GBP=(100.041481+99.712505+99.755536+101.929933+102.687887+103.798255+105.787280+105.246903+102.949490+101.310626+103.335064+105.418861)/1
# print(GBP)
in_INR['GBP']=GBP

#____CAD(canadian doler)
CAD=(60.898044+61.449631+60.064364+60.754210+60.882935+61.813283+62.125644+61.481675+61.275746+60.747257+60.705448+62.046307)/12
# print(CAD)
in_INR['CAD']=CAD

#____SGD(singapore doller)
SGD=(61.679661+62.008599+61.307957+61.527907+61.426960+61.057107+61.527335+61.342233+60.905875+60.799677+61.709571+62.501865)/12
# print(SGD)
in_INR['SGD']=SGD

#____AED(emirates dirhum)
AED=(22.261805+22.489148+22.396434+22.315542+22.405886+22.381489+22.379217+22.555030+22.603583+22.663649+22.673382+22.667280)/12
# print(AED)
in_INR['AED']=AED

#____ARS(argentina peso)
ARS=(0.449927+0.431310+0.406665+0.381243+0.357208+0.332186+0.309878+0.259562+0.237255+0.237865+0.236016+0.134561)/12
# print(ARS)
in_INR['ARS']=ARS

#____BGN(gulgarian dinar)
BGN=(45.066322+45.231005+45.019499+45.997891+45.788275+45.544731+46.447002+46.223916+45.355973+44.964573+46.018372+46.464724)/12
# print(BGN)
in_INR['BGN']=BGN

#____BHD(Bahraini dinar)
```

```
BHD=(217.437446+219.657973+218.752399+217.962308+218.844722+218.606435+218.584236+220.301460+220.775683+221.362370+221.457438+221.397833)
# print(BHD)
in_INR['BHD']=BHD


#____BRL(brazilian real)
BRL=(15.735074+15.962007+15.765951+16.332415+16.543186+16.909165+17.121035+16.905117+16.789924+16.441639+16.979236+16.999323)/12
# print(BRL)
in_INR['BRL']=BRL


#____CHF(swiss franc)
CHF=(88.457679+89.215338+88.785791+91.098967+91.683333+91.262954+93.906924+94.316543+92.446166+92.097762+93.323893+96.236575)/12
# print(CHF)
in_INR['CHF']=CHF


#____CNY(Chinease yuan renminbi)
CNY=(12.028875+12.082450+11.930002+11.906241+11.788305+11.497172+11.427445+11.452466+11.402709+11.440045+11.537872+11.682046)/12
# print(CNY)
in_INR['CNY']=CNY


#____HKD(hongkong doller)
HKD=(10.455789+10.525120+10.478377+10.438167+10.497589+10.494134+10.511150+10.585299+10.600627+10.635743+10.666037+10.659044)/12
# print(HKD)
in_INR['HKD']=HKD


#____ILS(israeli shekel)
ILS=(23.726526+23.360291+22.709680+22.556217+22.443170+22.575236+22.407931+22.143208+21.749399+20.952895+21.840618+22.692474)/12
# print(ILS)
in_INR['ILS']=ILS


#____JPY(japanese yen)
JPY=(0.627919+0.621103+0.615257+0.614254+0.599954+0.582310+0.581897+0.572462+0.562114+0.556750+0.555437+0.578510)/12
# print(JPY)
in_INR['JPY']=JPY


#____LKR(srilankan rupee)
LKR=(0.223569+0.226209+0.247145+0.254014+0.265296+0.272037+0.257213+0.257462+0.256952+0.256074+0.253741+0.254849)/12
# print(LKR)
in_INR['LKR']=LKR


#____PKR(pakistan rupee)
PKR=(0.349729+0.308962+0.294214+0.288056+0.287337+0.286720+0.291167+0.282537+0.278033+0.296416+0.291431+0.293654)/12
# print(PKR)
in_INR['PKR']=PKR
```

Final Dictionary

```
for x,y in in_INR.items():
  print(x," : ",y)


    USD  :  67.92728508333332
    EUR  :  89.33616691666667
    AUD  :  54.86134475
    GBP  :  102.66448508333333
    CAD  :  61.18704533333334
    SGD  :  61.482895583333324
    AED  :  22.48270375
    ARS  :  0.31447300000000006
    BGN  :  45.67685691666667
    BHD  :  219.59502524999996
    BRL  :  16.540339333333336
    CHF  :  91.90266041666668
    CNY  :  11.681302333333335
    HKD  :  10.545589666666666
    ILS  :  22.42980375
    JPY  :  0.5889972499999999
    LKR  :  0.25204675000000004
    PKR  :  0.295688
```

The Convertion Code

```python
print("\n_____CURRENCY CONVERTER_____\n")

while(True):
  try:
    choice=int(input("1 . Convert Other Currency to INR\n2 . Convert INR to Other Currency\n\nEnter your choice : "))
  except ValueError:
    print("                                    x x x x x   Enter valid Input  ( Either number 1 or number 2 ONLY )   x x x x x\n\n
    continue

  if choice==1 or choice==2:
    break
  else:
    print("                                    x x x x x   Enter valid Input  ( Either number 1 or number 2 ONLY )   x x x x x\n\n


if choice==1:
  while(True):
    try:
      print()
      amount=float(input("\nEnter the Amount  :  "))
    except ValueError:
        print("\n                                    x x x x x   Invalid input. Please enter a number.   x x x x x\n")
        continue

    if amount<0:
      print("\n                                    x x x x x   Enter a valid amount . Amount should be greater than or equal to Ze
      continue

    print("\n     USD for United States Dollar (USA)\n",
    "   EUR for Euro (European Union)\n",
    "   AUD for Australian Dollar (Australia)\n",
    "   GBP for British Pound Sterling (United Kingdom)\n",
    "   CAD for Canadian Dollar (Canada)\n",
    "   SGD for Singapore Dollar (Singapore)\n",
    "   AED for United Arab Emirates Dirham (United Arab Emirates)\n",
    "   ARS for Argentine Peso (Argentina)\n",
    "   BGN for Bulgarian Lev (Bulgaria)\n",
    "   BHD for Bahraini Dinar (Bahrain)\n",
    "   BRL for Brazilian Real (Brazil)\n",
    "   CHF for Swiss Franc (Switzerland)\n",
    "   CNY for Renminbi (China)\n",
    "   HKD for Hong Kong Dollar (Hong Kong)\n",
    "   ILS for Israeli New Shekel (Israel)\n",
    "   JPY for Japanese Yen (Japan)\n",
    "   LKR for Sri Lankan Rupee (Sri Lanka)\n",
    "   PKR for Pakistani Rupee (Pakistan)" )

    while(True):
      currency_code=input("\nEnter Currency Code : ").upper().strip()
      if currency_code in in_INR.keys():
        converter = amount * in_INR[currency_code]
        print("----------------------------------------------------------------------------------------\n")
        print(amount,currency_code,"is equal to" ,converter,"Indian Rupees\n\n\n")
      else:
        print("                                    x x x x x   Invalid currency code. Please input valid Currency Code   x x x x x
        continue
      break
    break



if choice==2:
  while(True):
    try:
      print()
      amount=float(input("\nEnter the Amount  :  "))
    except ValueError:
        print("\n                                    x x x x x   Invalid input. Please enter a number.   x x x x x\n")
        continue

    if amount<0:
      print("\n                                    x x x x x   Enter a valid amount . Amount should be greater than or equal to Ze
      continue

    print("\n     USD for United States Dollar (USA)\n",
    "   EUR for Euro (European Union)\n",
    "   AUD for Australian Dollar (Australia)\n",
    "   GBP for British Pound Sterling (United Kingdom)\n",
    "   CAD for Canadian Dollar (Canada)\n",
    "   SGD for Singapore Dollar (Singapore)\n",
    "   AED for United Arab Emirates Dirham (United Arab Emirates)\n",
    "   ARS for Argentine Peso (Argentina)\n",
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"   BGN for Bulgarian Lev (Bulgaria)\n",
"   BHD for Bahraini Dinar (Bahrain)\n",
"   BRL for Brazilian Real (Brazil)\n",
"   CHF for Swiss Franc (Switzerland)\n",
"   CNY for Renminbi (China)\n",
"   HKD for Hong Kong Dollar (Hong Kong)\n",
"   ILS for Israeli New Shekel (Israel)\n",
"   JPY for Japanese Yen (Japan)\n",
"   LKR for Sri Lankan Rupee (Sri Lanka)\n",
"   PKR for Pakistani Rupee (Pakistan)" )

while(True):
  currency_code=input("\nEnter Currency Code : ").upper().strip()
  if currency_code in in_INR.keys():
    converter = amount / in_INR[currency_code]
    print("-------------------------------------------------------------------------------------\n")
    print(amount,"Indian Rupees is equal to" ,converter,currency_code,"\n\n\n")
  else:
    print("                                   x x x x x   Invalid currency code. Please input valid Currency Code   x x x x x
    continue
  break
break
```

```
_____CURRENCY CONVERTER_____

1 . Convert Other Currency to INR
2 . Convert INR to Other Currency

Enter your choice : 1


Enter the Amount  :  10

    USD for United States Dollar (USA)
    EUR for Euro (European Union)
    AUD for Australian Dollar (Australia)
    GBP for British Pound Sterling (United Kingdom)
    CAD for Canadian Dollar (Canada)
    SGD for Singapore Dollar (Singapore)
    AED for United Arab Emirates Dirham (United Arab Emirates)
    ARS for Argentine Peso (Argentina)
    BGN for Bulgarian Lev (Bulgaria)
    BHD for Bahraini Dinar (Bahrain)
    BRL for Brazilian Real (Brazil)
    CHF for Swiss Franc (Switzerland)
    CNY for Renminbi (China)
    HKD for Hong Kong Dollar (Hong Kong)
    ILS for Israeli New Shekel (Israel)
```

OUTPUT

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    PKR for Pakistani Rupee (Pakistan)

Enter Currency Code : USD
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10.0 USD is equal to 679.2728508333332 Indian Rupees
```