

Forum:[Hack Forums](#)

Thread: [Currency Converter](#)

XBatt - November 10, 2013, 7:39 am

Here is a currency converter I made, I know it's not very efficient and there are other ways to make this better. Please provide suggestions, also what does the "def" do in python?

PHP Code

```
<?php
#CURRENT EXCHANGE RATES
pound = 1.00
euro = 1.19
dollar = 1.60
yen = 158.33
#CURRENT EXCHANGE RATES

print ("Welcome to my Currency Converter")
print ("==")
print ("The current exchange rates are:")
print ("\n£1 = $1.60")
print ("\n£1 = €1.19")
print ("\n£1 = ¥158.33")
ccinput = input(
"If you would like to change the currency please enter 1\nIf you would like to do a currency conversion enter 2\nIf you would like to print a text file with the current exchange rates enter 3\nYour selection:")
if ccinput == ("1"):
    print ("You have chosen to change the exchange rates")
    print ("This is currently in progress")

elif ccinput == ("2"):
    print ("\n==")
    print ("You have chosen to convert a currency")
    print ("==")
    currencychoice = input(
    "Please choose which currency to exchange, pound, euro, dollar or yen?\nYour selection:")

    ##
    if currencychoice == ("pound"):
        poundselect1 = input ("What currency would you like to exchange your pound to?:")

        if poundselect1 == ("euro"):
            pondeuroselect = input(
            "You have chosen to exchange pound to euro, how many pounds would you like to exchange to euro?")
            intconvert1 = int(pondeuroselect)
            print (intconvert1*euro)

        elif poundselect1 == ("dollar"):
```

```

    pounddollarselect = input(
"You have choosen to exchange pound to dollar, how many pounds would you like to exchange to d
ollar?")
    intconvert2 = int(pounddollarselect)
    print (intconvert2*dollar)

    elif poundselect1 == ("yen"):
        poundyenselect = input(
"You have choosen to exchange pound to yen, how many pounds would you like to exchange to yen
?")
        intconvert3 = int(poundyenselect)
        print (intconvert3*yen)
        else:
            print ("FAIL, please try again.")

else:
    1 + 1

##

if currencychoice == ("euro"):
    euroselect1 = input ("What currency would you like to exchange your euro to?:")

    if euroselect1 == ("pound"):
        europoundselect = input(
"You have choosen to exchange euro to pound, how many pounds would you like to exchange to eu
ro?")
        intconvert4 = int(europoundselect)
        print (intconvert4*0.84)

        elif euroselect1 == ("dollar"):
            eurodollarselect = input(
"You have choosen to exchange pound to dollar, how many pounds would you like to exchange to d
ollar?")
            intconvert5 = int(eurodollarselect)
            print (intconvert2*dollar)

            elif euroselect1 == ("yen"):
                euroyenselect = input(
"You have choosen to exchange pound to yen, how many pounds would you like to exchange to yen
?")
                intconvert6 = int(euroyenselect)
                print (intconvert6*yen)
                else:
                    print ("FAIL, please try again.")

            else:
                1 + 1

        ##

        if currencychoice == ("dollar"):
            dollarselect1 = input ("What currency would you like to exchange your dollar to?:")

```

```

    if dollarselect1 == ("pound"):
        dollarpoundselect = input(
"You have choosen to exchange euro to pound, how many pounds would you like to exchange to eu
ro?")
        intconvert7 = int(dollarpoundselect)
        print (intconvert7*0.62)

    elif dollarselect1 == ("euro"):
        dollareuroselect = input(
"You have choosen to exchange pound to dollar, how many pounds would you like to exchange to d
ollar?")
        intconvert8 = int(dollareuroselect)
        print (intconvert8*euro)

    elif dollarselect1 == ("yen"):
        dollaryenselect = input(
"You have choosen to exchange pound to yen, how many pounds would you like to exchange to yen
?")
        intconvert9 = int(dollaryenselect)
        print (intconvert9*yen)
    else:
        print ("FAIL, please try again.")
    else:
        1 + 1

elif ccinput == ("3"):
    text_file = open("current_exchange_rates.txt", "w")

    text_file.write("£1 = $1.60 \n")
    text_file.write("£1 = €1.19 \n")
    text_file.write("£1 = ¥158.33\n")

    text_file.close()
    print("The text file has been created in the directory of this script!")

else:
    print ("Sorry you have crashed the program please restart :P")

input("...Please press enter to close:...")

```

Thanks

glob - November 10, 2013, 9:30 am

Wow. Yes that code could be improved, a lot. def means declare function. Simply put, it basically creates a variable that, when called, will execute instructions.

PHP Code

```

<?php
def hi(): #Creates a function under the name "hi"
    print "Hello World" #This is where the body of the functin is (the instructions executed)
hi()
#This is the function call, and when this is called, all the instructions within the function body will be
executed successively

```

The body of the function is not executed until the function is called.

You can read more about functions here:

<http://docs.python.org/release/1.5.1p1/tut/functions.html>

and here:

http://www.tutorialspoint.com/python/python_functions.htm

XBatt - November 10, 2013, 10:30 am

Ah, that's quite easy to understand. And how can I improve the code?

Also, when writing out the body of the def how do you tell python this is the end of the body of def?

glob - November 10, 2013, 11:26 am

(Nov 10, 2013 11:30 AM)XBatt Wrote: [\[CITE\]](#) Ah, that's quite easy to understand. And how can I improve the code?

Also, when writing out the body of the def how do you tell python this is the end of the body of def?
The body of the function is indented. Once indentation ceases, the interpreter assumes that that is the end of the function declaration.

XBatt - November 10, 2013, 11:35 am

(Nov 10, 2013 12:26 PM)CATALYsT Wrote: [\[CITE\]](#) The body of the function is indented. Once indentation ceases, the interpreter assumes that that is the end of the function declaration.

Ah okay, and how can I make my currency converter more efficient? or simpler for the user?

Can anyone help me with this? Advice? Tips?