code-challenge1

January 16, 2024

Group Challenge 1:

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    Write a program which prompts the user for a measurement in inches, converts to centimeters, and
    prints out the converted measurement.
[]: def convert_in_to_cm():
         inchs = float(input("Enter the length in inch: "))
         return (inchs * 2.54)
[]: convert_in_to_cm()
[]: 2.54
    Write a script that takes a user's:
    Name
    Academic Program
    Job Title
    Email
    Phone number
     Returns an email signature
[]: def introduce_yourself():
         name = input("Enter your name: ")
         academic_program = input("Enter the academic program that you are in: ")
         job_title = input("Enter the job title: ")
         email = input("Enter the email: ")
         phone = input("Enter the phone number: ")
         signature = f"{name}\n{academic_program} ||\n{job_title} ||\n{email} ||_
      →{phone}"
         return signature
[]: print(introduce_yourself())
    Xuyuan
    MAE 2023 ||
```

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BS ||
    zxuyuan@umich.edu || 734-489-4829
    Use this timeanddate.com site to calculate number of days you have been alive for.
    Can be done with variables
    Can be done with only values
    Can be done with a combination of variables and values
[]: from datetime import datetime
     def calculate_day_and_seconds():
         year = int(input("Enter your birthday year: "))
         month = int(input("Enter your birthday month: "))
         day = int(input("Enter your birthday day: "))
         birthday = datetime(year, month, day)
         current_date = datetime.now()
         # Calculate the number of days alive
         days_alive = (current_date - birthday).days
         seconds_per_day = 24 * 60 * 60
         days_alive_seconds = days_alive * seconds_per_day
         return (days_alive,days_alive_seconds)
[]: print(calculate_day_and_seconds()) # 2001, 01, 30
    (8386, 724550400)
    Create a Mad Libs Generator that takes
    3 nouns
    1 plural noun
    1 place
    1 adjective
    And outputs a mad lib...
    Be kind to your [NOUN 1] - footed [PLURAL NOUN]
    For a duck may be somebody's [NOUN 2],
    Be kind to your [PLURAL NOUN] in [PLACE]
    Where the weather is always [ADJECTIVE] .
    You may think that is this the [NOUN 3] ,
    Well it is.
```

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[]: def mad_lib_generator():
        noun1 = input('Choose a noun: ')
        plural_noun = input('Choose a plural noun: ')
        noun2 = input('Choose a noun: ')
        place = input('Name a place: ')
        adjective = input('Choose an adjective (Describing word): ')
        noun3 = input('Choose a noun: ')
        mad lib = (f"-----\n"
                   f"Be kind to your {noun1}-footed {plural_noun}\n"
                   f"For a duck may be somebody's \{noun2\}, \n"
                   f"Be kind to your {plural_noun} in {place}\n"
                   f"Where the weather is always {adjective}.\n\"
                   f"You may think that this is the \{noun3\}, \n"
                   f"Well, it is.\n"
                   f"----")
        return mad_lib
[]: print(mad_lib_generator())
    Be kind to your 1-footed 2
    For a duck may be somebody's 3,
    Be kind to your 2 in 4
    Where the weather is always 5.
    You may think that this is the 6,
    Well, it is.
```

[]: