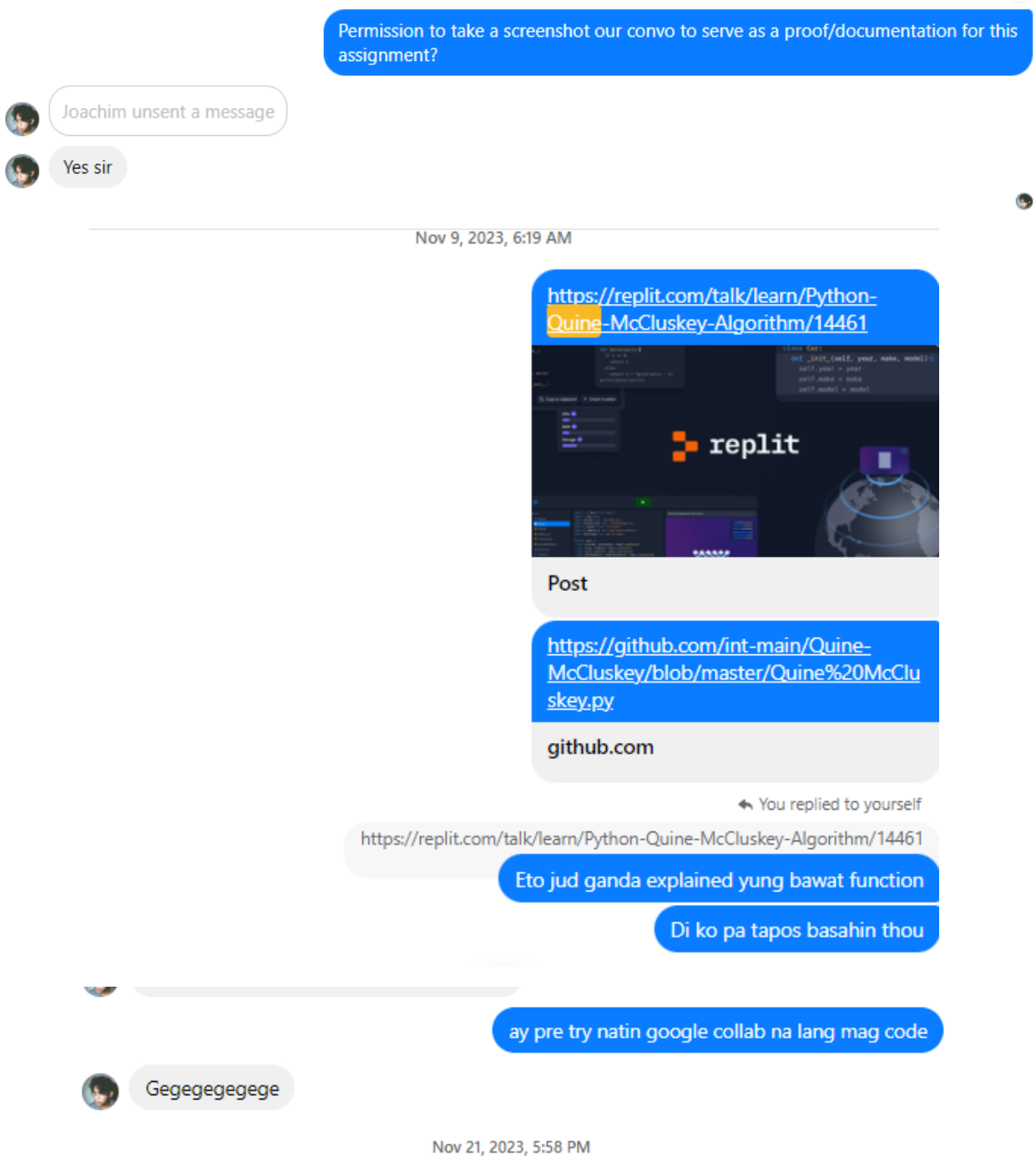
Gonzales, Joachim Lowe Z.

Tuatis, Juan Francis C.

Quine-McCluskey Coding Assignment Documentations

Conversation with Mr. Gozales regarding the code:



Maya ko pa gagawin pre

egege pre wala parin ako idea kung ano matutulong ko e HAHAHAHAHHA

Mga 3 ko simulan try ko lang

Coconvert string to list to e tapos ssplit mo

https://colab.research.google.com/notebooks/intro.ipynb

Welcome To Colaboratory

try mo nga boi kung maaccess mo

Oo pre

Nov 26, 2023, 2:07 PM

Ganito pala magiging flow non pre
-Bali may dalawang input tayo
Minterms and variables both strings.

-Coconvert natin strings to list
- Convert to binary

-Then gagamit tayo ng function which is yung number of 1s mag gogroup

Saang part ka na?

Feeling ko pre okay na yung inputs

oo pre

ano na next nagagawin?

ano na pre checking kung may duplicate input

boi di mo ginawang list yung sa first part?

yung sop ba?

oo pre magiging list yon talaga dapat

ang iniisip ko paano coconvert to binary

AHHAAHHAHAHA

list na ah?

ayyyyyyyyyy

AHAHHAHAHAHA

eto pinaka bagong ver pre

quine_mccluskey_coding_assignment.py
1.31 KB

try natin sa github mag collab

gawa ka github pre

github tayo mag lapag

lagay mo username mo dito para maadd kita

Nov 27, 2023, 9:33 AM

Okay lang pre

ano na matutulong ko yah?

Yung inupload ko boi sa github

tangina bat may n-word don HAHAHHAAH

You replied to Joachim

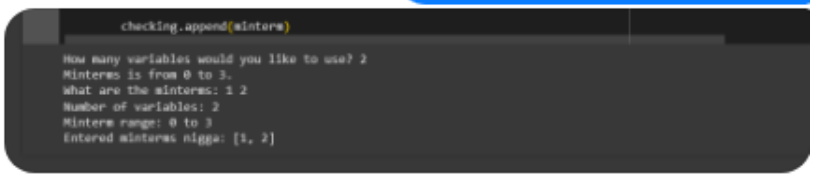
Yung inupload ko boi sa github

ano na next dito pre?

Binary na pre

Di ko na alam kung paano HAHAHAHAHA

dito natigil yung code output no?



Ohsmim

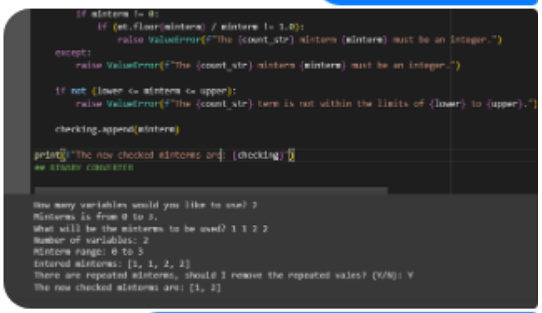
medyo naayos ko yata (?) HAHAHAHA nung inalis ko sa fuction pre gumana siya HAHAHAHA pero wala na ko idea ano next step

Me too son me too

HAHAHAHAHAHAHAHA

Nov 27, 2023, 11:00 AM

okay na ba to yah?



andon sa hub yung bagong code pre

sa file ko

Oo ya

Ginawa mong reference code ko?

You replied to Joachim

Ginawa mong reference code ko?

medyo HAHAHA tapos pinacorrect ko sa chat gpt

HAHAHAHAHAHAHAHA gesi gesi

Binary naman oyats

bali ang ginawa ko nilabas ko lang talaga siya sa funciton HAHAHAHA

You replied to Joachim

Binary naman oyats

ggg

Joachim replied to you

ggg

What gamit na lang tayong bin function

Iterations na kasi yung grouping don

Tapos gagamit na ng pandas df

```
Binary Encoded Minterms:
Minterm 0: 00000
Minterm 1: 00001
Minterm 2: 00010
Minterm 4: 00100
Minterm 7: 00111
Minterm 10: 01010
Minterm 15: 01111
Minterm 18: 10010
Minterm 22: 10110
```

Pwede naman

Oo yan mas okay

Ano ginawa mo boi?

```
print("\nBinary Encoded Minterms:")
for binary_representation, original_minterm in zip(encoded_result, indicator_result):
    print(f"Minterm {original_minterm}: {binary_representation}")
```

Ano tinanggal niya?

instead na cinocall niya yung for loop for 1st, 2nd shits gumawa siya bagong for loop na nakadepende sa encoded, at indicator

Update mo github boi

okie na pre

pero di ko pa inaalis yung for loop para sa 1st, 2nd

Pwede na natin i neglect to

Wala na yan pre

Yuny if else

yung buong for loop? or yung try saka except lang?

Pwede naman tayo gumamit ng bin pre no need mag import ng numpy

pero di naumusad from there HAHAHAHA

Usually ginagawa ni numpy, gumagawa lang siya ng aaray e

2D or 3D array

You replied to Joachim

> Pwede naman tayo gumamit ng bin pre no need mag import ng numpy

di nga natin to nagamit diba?

Need pa rin pre

Pati pandas

Kasi gagawa tayo ng table pre

Para don niya istore

egege panoorin ko muna recording nila toni baka may makuha akong usefull

Bali coconvert natin yung code natin to numpy arrsy pre

Tapos gagamit din tayo dataframe

Nakalimutan ko na itertool

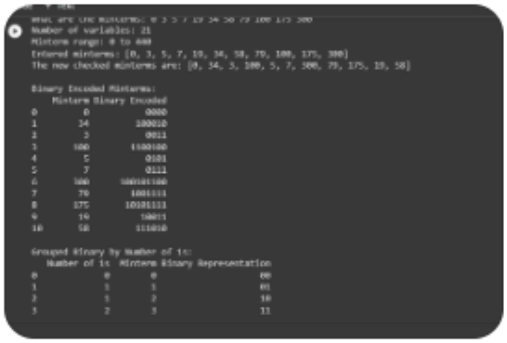
check mo inupload kong bago

okie

Not final

yung zfill di ko alam kapag malaki na integer e

try mo mag blackbox ai mas more on code problems siya



```
## BINARY CONVERTER
def binary_encoder(minterms):
    encoded = []
    indicator = []

    for minterm in minterms:
        binary = bin(minterm)[2:]   # Convert to binary without the '0b' prefix
        encoded.append(binary.zfill(var))
        indicator.append(minterm)

    # Create a list of dictionaries
    rows = [{'Minterm': minterm, 'Binary Encoded': binary} for minterm, binary in
zip(indicator, encoded)]

    # Create a pandas dataframe
    df = pd.DataFrame(rows)

    return df

df = binary_encoder(minterms)

print("\nBinary Encoded Minterms:")
print(df)
```

kuha ko na, dedepend lang siya kay var

inupdate ko code

para maganda yung pag convert

```
#Prime Implicants
def prime_implicants(str1 , str2):
    differences = sum(c1 != c2 for c1, c2 in zip(str1, str2))
    return differences == 1

# Replace differing bits with a dash
def replace_with_dash(str1, str2):
    return ''.join(c1 if c1 == c2 else '-' for c1, c2 in zip(str1, str2))

paired_minterms = []
paired_binary = []
pairing = {}

for i in range(len(grouped_binary)):
    for j in range(i + 1 , len(grouped_binary)):
        if prime_implicants(grouped_binary[i][2] , grouped_binary[j][2]):
            change = replace_with_dash(grouped_binary[i][2] , grouped_binary[j][2])
            paired_binary.append(change)
            paired_minterms.append((grouped_binary[i][0], grouped_binary[j][0]))
            pairing = dict(zip(paired_minterms , paired_binary))

df = pd.DataFrame(list(pairing.items()), columns=['Minterms', 'Binary
Representation'])
print(df)
```

😮

```
   Minterms Binary Representation
0    (1, 5)                  0-01
1    (4, 5)                  010-
2   (4, 12)                  -100
3   (5, 13)                  -101
4   (8, 12)                  1-00
5  (12, 13)                  110-
6  (13, 15)                  11-1
```

❤️

Nov 28, 2023, 2:06 AM

Nag update ako ng notfinal.py sa github pre

Tulog na ako HAHAHAHAHA

Nov 28, 2023, 5:49 AM

Ang next step ay? Compare ulit no?

nageerror pre?

list out of range?

Joachim Gonzales
Active now

quine 4 results Close

Pre

Iniisip ko rin sa phases mag lagay siya ng variables AAHAHAHAHAHHAAHAHA

Nov 28, 2023, 7:39 PM

tangina malapit na yah

```
Second Phase:
          Minterms Binary
0  ((0, 1), (0, 2))     0-
1  ((0, 1), (1, 3))     0-
2  ((0, 1), (2, 3))     --
3  ((0, 2), (1, 3))     --
4  ((0, 2), (2, 3))     -0
5  ((1, 3), (2, 3))     -1
```

konting chat gpt pa to

Gesi ya

Nov 28, 2023, 8:34 PM

update: AHAHAHHAAHHAH di parin maayos

```
Second Phase:
          Minterms Binary
0  ((0, 1), (0, 2))     --
1  ((0, 1), (1, 3))     --
2  ((0, 1), (2, 3))     --
3  ((0, 2), (1, 3))     --
4  ((0, 2), (2, 3))     --
5  ((1, 3), (2, 3))     --
```

ito ba boi?

```
Prime Implicator Chart
   A  B  C  D  0  1  4  5  6  8  9 10 12 15
0  1  1  1  1                             O
1  1  0  -  0                X     O
2  0  1  -  0          X     O
3  0  -  0  -  X  X  X  O
4  -  0  0  -  X  X           X  O
5  -  -  0  0  X     X        X        O
6              /  /  /  /  /  /  /  /  /  /
```

ss mo second iteration

ang meron lang sa output na yon "0-0-","-00-","--00"

```
ITERATION 2
   Minterm Pairs  A  B  C  D
0  [4, 12, 0, 8]  -  -  0  0
1   [9, 1, 0, 8]  -  0  0  -
2   [5, 1, 4, 0]  0  -  0  -
```

may binalik siyang uncompared values from previous pre

```
💡 Click here to ask Blackbox to help you code faster
#3rd phase check to group it by distict pair
phase_3 = phase_2.groupby('Binary')['Minterms'].apply(list).reset_index()


print("\nThird Phase:")
print(phase_3)
```

```
✓ 0.0s

Third Phase:
  Binary                                Minterms
0   --00  [((0, 4), (8, 12)), ((0, 8), (4, 12))]
1   0-0-    [((0, 1), (4, 5)), ((0, 4), (1, 5))]
```

Dec 2, 2023, 2:23 PM

https://github.com/int-main/Quine-McCluskey/blob/master/Quine%20McCluskey.py

github.com

may nakita ko boi na pang final tab kaso di ko magets HAHAHAHA baka ikaw magets mo HAHAHAHAH

Dec 2, 2023, 2:45 PM

Eyyyyyy

Mamaya pre

Indicator and encoded na empty list ang babaguhin?

Lahat boi

Gawin mo lang indicator

Para universal accepted

And di nakaklito

so bali yung mga indicator_results and encoded_results will be changed to indicator at encoded na lang?

Opo

okay na boi

Wait aupload ako code maya maya

You replied to Joachim

Wait aupload ako code maya maya

don sa ver 11_28_23 na file yung bago pre

Dec 2, 2023, 10:45 PM

Gegegegegge upload ko later pre

Ya paupdate sa github

Here's what i want you to do sa part na ito

starting from that to dulo pre

ganito dapat mangyari, gawa ka ng function pre na sa loob si tabulated, minterms , at indicator

kasi pre maganda kasi gawin diyan yung A B C D pa rin mag rereflect

na mag rereplace with dashes

bali?
def replace(tabulated, minterms, indicator)?

Opo

May inupload me pre

not_final

Gawa muna ako uts

Github Collaboration Files Proof: