'''

Write a program to add , subtract , multiply and divide two complex numbers

First complex number ---> 3 + 4j

2nd complex number ---> 5 + 6j

What is the sum ? ---> (3 + 4j) + (5 + 6j) = 8 + 10j

What is the difference ? ---> (3 + 4j) - (5 + 6j) = -2 - 2j

What is the product ? ---> (3 + 4j) \* (5 + 6j) = 15 + 18j + 20j - 24 = -9 + 38j

What is the division ? ---> (3 + 4j) / (5 + 6j) = (3 + 4j) \* (5 - 6j) / (5 + 6j) \* (5 -6j)

= (15 - 18j + 20j + 24) / (25 + 36)

= 39 / 61 + 2j / 61

'''

# Identify error

else:

print('else suite')

print('Outside')

* Without ‘ if ‘ statement ‘else ‘ which is not executed

# Identify error

if 9 > 5

print('Hello')

print('Bye')

* After ‘if’ statement “ : “ is mandatory

# Identify error

if 9 > 12:

print('Hyd')

else

print('Sec')

* After ‘else’ statement “:” is mandatory

# Identify error

if (10,20,15):

print('Hyd')

else:

print('Sec')

* After condition decleration , new line or block of code must be after space weather its ‘if’ or ‘else ‘ after

# Identify error

if ():

print('Hyd')

else:

print('Sec')

print('Bye')

* After ‘if’ statement else part decleration also be in same line as per if () block whih doesn’t exceed line then if

# Identify error

if { }:

{

print('One')

print('Two')

print('Three')

}

else:

{

print('Four')

print('Five')

print('Six')

}

print('Bye')

* Condition between ‘if’ and else blocks always follows or not followed by only “ ( ) “ or not with “ ( )” condition doesn’t defines by “ { } “

# Identify error

if ():

print('One')

print('Two')

print('Three')

else:

#error

# after else statement “if” statement which starts from after space on next line , doesn’t on sameline

if []:

print('Four')

print('Five')

print('Six')

else:

if {}:

print('Seven')

print('Eight')

print('Nine')

else:

print('Hyd')

print('Sec')

print('Cyb')

print('Bye')

#error

* Hyd Sec Cyb Bye //all conditions are non empty strings which returns false
* # after else statement “if” statement which starts from after space on next line , doesn’t on sameline

# Write a program to determine a number is even or odd with   if  statement

#even or odd

n=eval(input("enter any number "))

if n%2==0:

    print(f"{n} is an Even Number")

else:

    print(f"{n} is an Odd Number ")

output:

enter any number 11

11 is an Odd Number

PS F:\>

# Find outputs (Home work)

if():

print('Hyd')

print('Sec')

print('Cyb')

else:

print('One')

print('Two')

print('Three')

print('Bye')

output: One Two Three Bye // because its an non empty string with no arguments

# Find outputs (Home work)

if{10 : 20 , 30 : 40}:

print('Hyd')

print('Sec')

print('Cyb')

print('Bye')

output : Hyd Sec Cyb Bye

# Find outputs (Home work)

if { }:

print('Hyd')

print('Sec')

print('Cyb')

print('Bye')

output :

* Bye // its non empty string and always Bye executed weather condition is true or false

# Write a program to print month name for input month number by using if and elif  (Home  work)

#month

import calendar

m = int(input("Enter month number: "))

if m>=1 and m<=12:

    name = calendar.month\_name[m]

    print(f"Month name: {name}")

else:

    print("Enter month number within 12 months")

:output : Enter month number: 8

Month name: August

Write a program to print digit in words with else and if (do not use elif)

0 - Zero

1 - One

2 - Two

....

9 - Nine

10 – Invalid

import math

n=int(input("enter any digit : "))

# if n>=0 and n<=9 :

#      if n==0:

#          print("ZERO")

#      if n==1:

#          print("ONE")

#      if n==2:

#          print("TWO")

#      if n==3:

#          print("THREE")

#      if n==4:

#          print("FOUR")

#      if n==5:

#          print("FIVE")

#      if n==6:

#          print("SIX")

#      if n==7:

#          print("SEVEN")

#      if n==8:

#          print("EIGHT")

#      if n==9:

#          print("NINE")

# else:

#     print(" enter valid digit below 9 ")

try:

    if n==0:

         print("ZERO")

    else:

     if n==1:

         print("ONE")

     else:

          if n==2:

           print("TWO")

          else:

           if n==3:

            print("THREE")

           else:

             if n==4:

              print("FOUR")

             else:

              if n==5:

               print("FIVE")

              if n==6:

                print("SIX")

              else:

               if n==7:

                print("SEVEN")

               else:

                if n==8:

                  print("EIGHT")

                else:

                 if n==9:

                   print("NINE")

except:

   print("enter valid input ")