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In [ ]: what is python ?
        #python is a programming language
        why python ?
        #free and open source
        #interpreted
        #interactive output = في نفس المكان الذي يكتب فيه الكود
        #easy to install
        #clean and easy
        #Error handling
        #Debugging is easy (Debugging is built with python)
        #cross platform (mac , windows , linux)
        #Expressive معبرة ومفهومة
        #oop
        #intergrated = مع لغة تانيه = فيه ابلكيشن بيتعمل من اكثر من لغة
        #support moude1 and package
        #large set of lib
        #multi purpose
        #memory mangement and carbage collection اللى ف الذاكرة اول ب اول
        #great community and growing fast

        python used for
        #web
        #games
        #hacking
        #ai
        #web scrabing
        #edsktop app
        #etc....

        #Python syntax is case-sensitive.
        # A _____ error does not cause the program to abort, but produces incorrect results.
        logical

        #What does the expression string1 + string2 do?
        Concatenates string1 and string2.

        #Python was created by _____.
        Guido van Rossum

        #What is used to define a block of code (body of loop, function etc.) in Python?
        Indentation

        Are there tools available to help find bugs, or perform static analysis?
        #Yes, PyChecker and Pylint.

        What does REPL mean in Python?
        #Read, Evaluate, Print, Loop

In [2]: print ("Hello , Python !") ; print ("i will make a game in the end of the coure")

Hello , Python !
i will make a game in the end of the course

In [5]: # use to cooment in python = #
        #6/8/2022

        to comment single line
        #print ("3omda")
        to comment multiline
        #
        #
        #

Out[5]: 0.000370919881305638

In [ ]: This example misses indentations to be correct.

        Insert the missing indentation to make the code correct:

        if 5 > 2:
        print("Five is greater than two!") #error

In [ ]: # Dealing with Data

        #our aplication contains code and Data
        #code in the line manage and deal with data
        #to structure with data we need categories (num , string , bool)
        #Data is stored in computer memory
        #we use variable to refer data
        # code using data to perform any operation

In [11]: #some Data types

        #all data in python is object
        # to print type name of data use
        # type ()

        print (type('TRUE'))
        print (type(True))
        print (type (51))
        print (type ([4.2 , 4 , 5]))

<class 'str'>
<class 'bool'>
<class 'int'>
<class 'list'>

In [12]: #Variables
        myname = 'Ahmed'
        print (myname)

Ahmed

In [13]: MYname = 'Ahmed'
        print (MYname)

Ahmed

In [18]: my_name = "Ahmed"
        print (my_name)

Ahmed

In [24]: #not valid variables
        # 100name = 'ahmed' #error
        # my name = 'ahmed ' #error
        # -myname = ' ahmed ' #error
        _myname = ' ahmed'
        print (_myname)
        #run

ahmed

In [26]: #cases
        myname = 'ahmed' #general case
        myName = 'ahmed ' #camel case
        my_name = 'ahmed ' # snake case
        print (myname)
        print (myName)
        print (my_name)

ahmed
ahmed
ahmed

In [28]: help('keywords') # يعرف بيها الكلمات المبحوزة ف بايثون

Here is a list of the Python keywords. Enter any keyword to get more help.

False      class      from       or
None        continue  global     pass
True        def        if          raise
and         del        import     return
as          elif       in          try
assert      else       is          while
async       except     lambda     with
await       finally   nonlocal   yield
break       for        not

In [30]: a , b , c = 5 , 4 , 3
        print (a)
        print (b)
        print (c)

5
4
3

In [ ]: #Basic Defenition

        #source code : original code you write in computer
        #translation : converting source code to machine language
        #compplition : translate code before run
        #run time : period app take to excute commands
        #interpreted : translate code line by line

In [31]: #seQANCe space \
        # \b : back space يتلها
        print ("Ahmed\b Emad")

Ahmed Emad

In [33]: # \ scape newline
        print ("my name \
        is \
        ahmed emad")

my name is ahmed emad

In [43]: #escape qute ' ' ""
        print ("Ahmed \"emad\"")

Ahmed "emad"

In [48]: #\n : print multi line
        print ("my name is ahmed\n i am a programmer")

my name is ahmed
i am a programmer

In [51]: #carrage return \r
        print ('123456\rabcde')

بسطيع = ٢ اللى بعد حرف
ويشوف عددده مثلا 5 ويمسح اول 5 ارقام قبل الحرف

abcde

In [52]: #horizontal tab \t
        print ("Ahmed\tEmad")

Ahmed Emad

In [57]: #concatenation +
        my_firstname = 'Ahmed'
        my_secname = 'Emad'
        print (my_firstname + my_secname)
        print (my_firstname +" "+ my_secname)
        print (my_firstname +"\n" +my_secname)

AhmedEmad
Ahmed Emad
Ahmed
Emad

In [ ]: first day to learn python 6/8/2022
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