Python PCAP 31-03 Exam Practice Questions List (Difficult or Reminder)

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Courses:

- Cisco Python Essential 1
- Cisco Python Essential 2
- Udemy PCAP 31-03

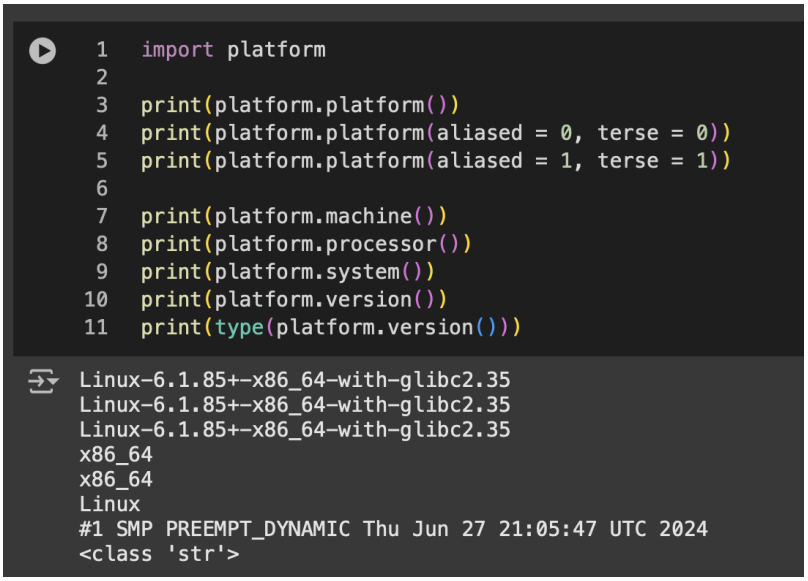
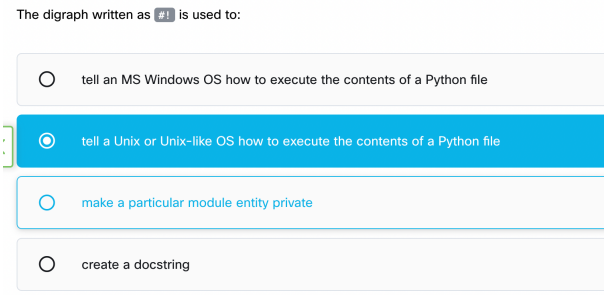
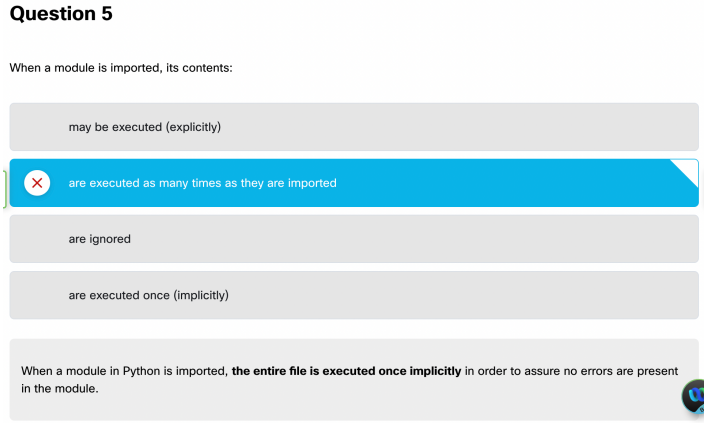
Exam Practice:

- Exam Practice Without Answer
- Exam Practice With Answer

> *Note :*
> *Passing grade 70/100 dari 40 soal, atau 28/40 soal. Berarti maksimal salah 12 soal.*

Modules & Packages

Soal	Keterangan
Select all valid option(s) about the result of dir() [ ] A list of filenames inside the directory [ ] A list of the module's attribute [ ] A list of names of class attributes [ ] A list of names of object attributes [ ] A list of names of the base class attributes Answer >>>	
`math.ceil() or math.floor()`	return `int`
`math.factorial(x)`	`x (int) >= 0` `0! = 1`
`random.choices(populasi, weights, k)`	return `list`
`random.sample(populasi, k)`	return `list`

Soal	Keterangan
	
	shebang or hashbang memberi tahu path to interpreter untuk dijalankan di Unix OS
	ketika import module, maka hanya di eksekusi sekali walaupun kita melakukan import berulang ulang
	- the console/terminal - the screen

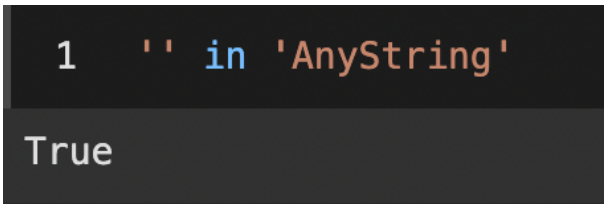
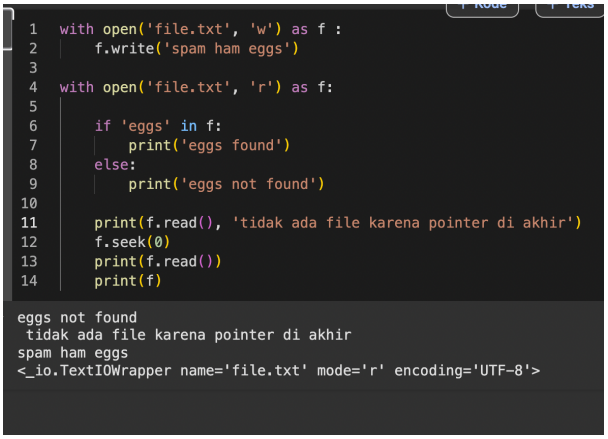
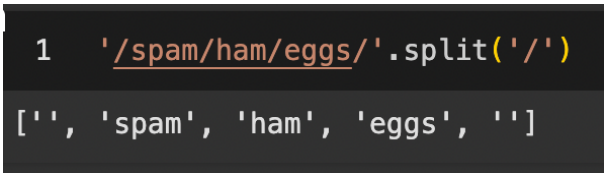
Error Handling *(Exceptions)*

Soal	Keterangan
What is the output of the following code? `class E (Exception):` `  def __init__ (self, message):` `  self.message = message` `  def __str__ (self):` `  return "Surprise"` `try :` `  raise Exception( "Stop" )` `except E as e:` `  print(e)` `else :` `  print( "Goodbye" )` ( ) Unhandled Exception ( ) Surprise ( ) Stop ( ) Goodbye	
What is the output of the following code? `try :` `  raise Exception` `except :` Default Except must be last `  print( "Spam" , end= " )` `except BaseException:` `  print( "Ham" , end= " )` `except Exception:` `  print( "Eggs" )`	
`class SpamException (Exception):` `  def __init__ (self, message):` `  <<< INSERT CODE HERE >>>` `  self.message = message` `raise SpamException( "Spam" )` [X] super().__init__(message) [ ] Exception.__init__(self, message) [X] super(SpamException, self).__init__(message) [ ] super.__init__(message)	
What is the result of the following code? `>>> assert ( False , 'Trigger Assertion' )` ( ) No output ( ) Trigger Assertion ( ) SyntaxError: invalid syntax ( ) Assertion is always true	tuple yang memiliki isi dianggap `True` `assert False, 'Message'` akan selalu `False`
Which of the following are examples of built-in **concrete** Python exceptions? (Select **two** answers) ☐ `BaseException` ☐ `ArithmeticError` ☑ `ImportError` ☑ `IndexError`	build in konkret (error plaing dasar/spesifik)
`try:` `  raise Exception` `except BaseException:` `  print("a")` `except Exception:` `  print("b")` `except:` `  print("c")` `a`	`BaseException` merupakan exception paling luas

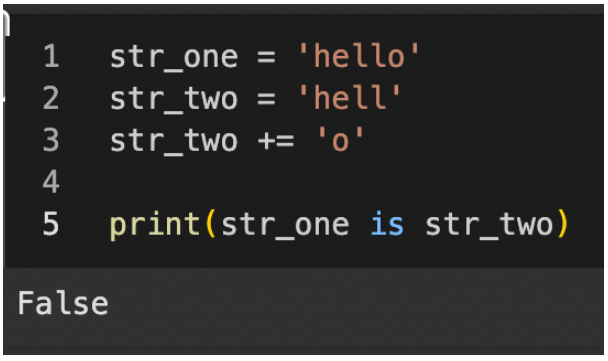
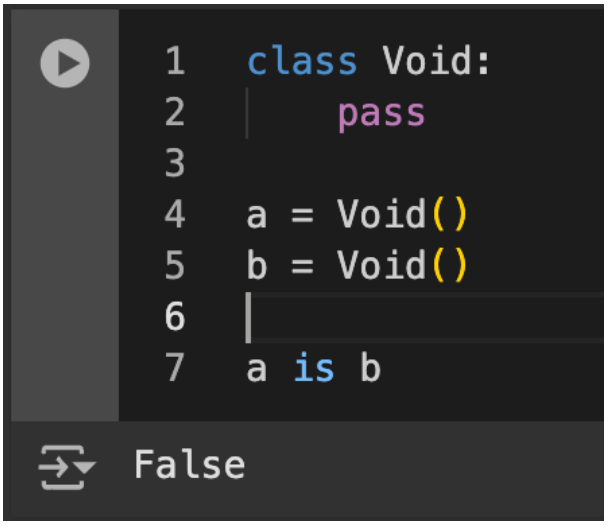
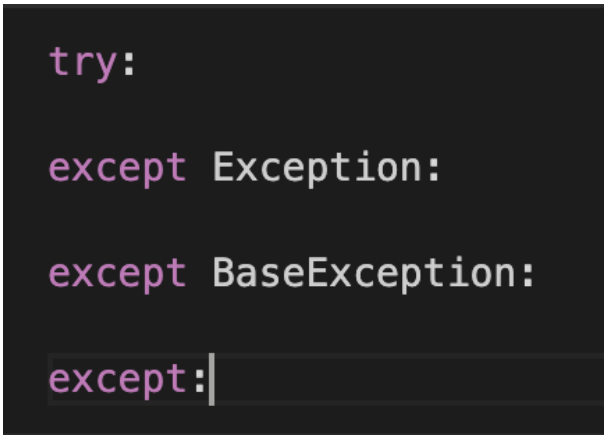
Strings

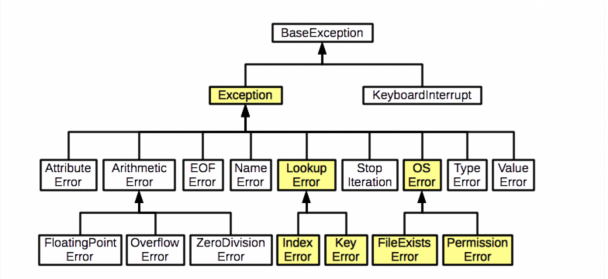
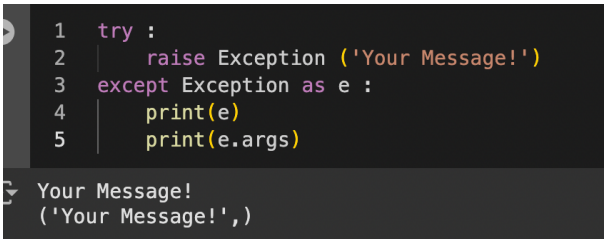
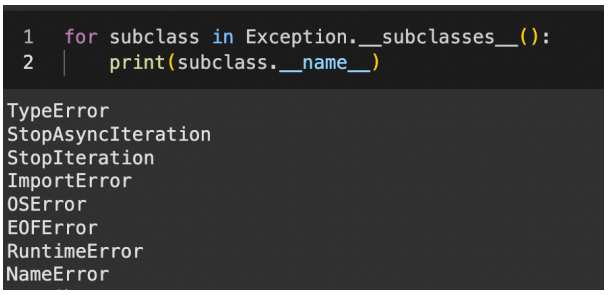
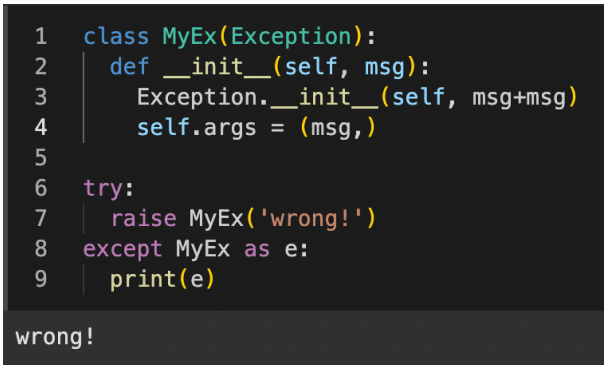
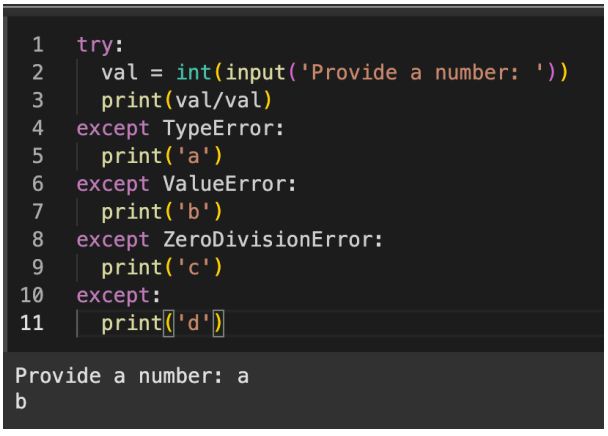
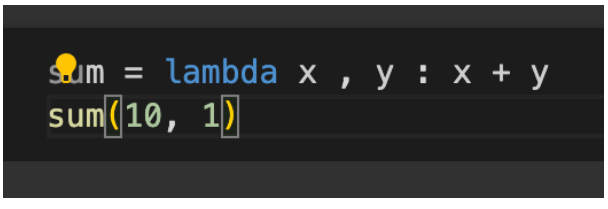
Soal	Keterangan
What is the output of the following code? `print( "C:\Program Files\Microsoft\Windows NT" , end= "" )` `print( "\")` ( ) Syntax Error ( ) C:\Program Files\Microsoft\Windows NT\ ( ) Replace escaped characters with "?" e.g. C:?rogram Files?icrosoft?indows NT? ( ) Ignore escaped characters e.g. C: rogram Filesicrosoftindows NT	Answer : - Syntax Error
* ASCII , UNICODE, UTF-8, codepoints, escape sequences Select all valid option(s) below about string [x] string.ascii_letters is a concatenation of ascii_lowercase and ascii_uppercase [ ] string.ascii_letters is a concatenation of ascii_lowercase, ascii_uppercase and digits [ ] string.ascii_letters are all printable characters found in the keyboard [x] string.ascii_lowercase contains 'abcdefghijklmnopqrstuvwxyz' [x] string.ascii_uppercase contains 'ABCDEFGHIJKLMNOPQRSTUVWXYZ'	Strings : upper + lower bukan digit dan any char
What is the output of the following code? `spam = chr( 'a' )` `ham = ord(spam)` `print(spam, ham)` ( ) 97 a ( ) TypeError: an integer is required (got type str) ( ) TypeError: chr() takes exactly two arguments (1 given) ( ) TypeError: ord() takes exactly two arguments (1 given) ( ) Syntax Error	Answer : b `chr(int)` not `chr('a')`
`spam = 'FuBar'` `ham = spam[:]` [x] spam == ham [x] id(spam) == id(ham) [ ] spam.startswith(ham) [ ] spam.endswith(ham) [ ] spam.equals(ham)	Jika *immutable*, python ga akan membuat memori baru `id(spam) == id(ham)`
What is the output of the following code? `>>> None * 2` ( ) 0 ( ) None ( ) NoneNone (x) TypeError: unsupported operand type(s) for * Answer >>>	not support NoneType
What is the output of the following code? `>>> sorted([ 5 , "1" , 100 , "34" ])` ( ) ["1", 5, "34", 100] ( ) [5, "1", "34", 100] ( ) ["1", "100", "34", "5"] ( ) [1, 5, 34, 100] (x) TypeError: '<' not supported between instances of 'str' and 'int'	cannot sort `int` and `str`
What is the output of the following code? spam.txt `spam ham eggs` spam.py `f = open( 'spam.txt' , 'r' )` `if 'eggs' in f:` `  print( 'Eggs found' )` `else :` `  print( 'Eggs not found' )` ( ) Eggs found (x) Eggs not found ( ) TypeError: argument type TextIOWrapper not iterable ( ) SyntaxError: invalid syntax	open(file, 'r') return file object not file content content = f.read()
Which of the calls below are valid String function calls and will return True? [x] 'abc123'.isalnum() [x] 'abc'.isalpha() [ ] '123abc'.isidentifier() [x] '123abc'.islower() [x] '123'.isdigit() [x] 'Abc'.istitle()	`isalnum()` -> `isalpha()` + `isnumeric()` `isnumeric` -> termasuk `isdigit(0-9)` `isidentifier()` -> cek apakah valid sebagai variable
What is the output of the following code? `>>> sorted([ 'banana' , 'pear' , 'grapes' , 'apple' ], key= lambda x: x[:: -1 ])`	`sorted(iter, key)` key = fungsi `key = lambda x : x  -1` -> reverse setiap element

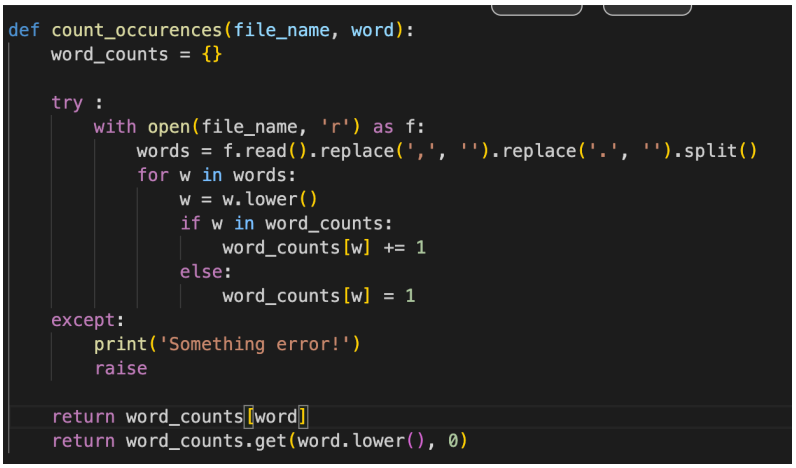
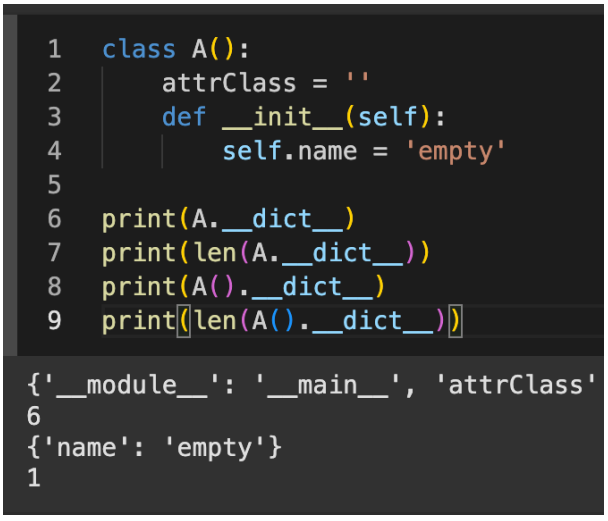
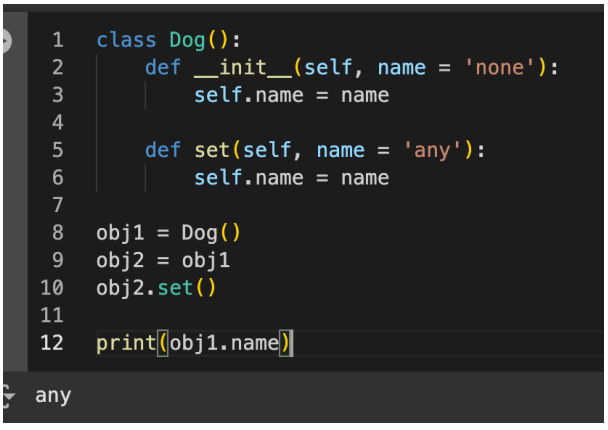
Soal	Keterangan
* .sort(), sorted(), .index() , .find(), .rfind() What is the output of the following code? `>>> "Spam Ham Eggs" .index( 'Spam' , 1 )` ( ) Spam ( ) 0 ( ) 1 (x) ValueError: substring not found ( ) TypeError: index() takes 1 argument (2 given)	`.index(str, start, end)` 'Spam' ada di index 0 bukan 1 jadi `ValueError = not found`
* .sort(), sorted(), .index(), .find() , .rfind() What is the output of the following code? `t = "Spam Ham"` `print(t.find( "Ham" , 0 ) == t.index( "Ham" , 0 ))` `print(t.find( "Eggs" , 0 ) == t.index( "Eggs" , 0 ))` ( ) True True ( ) True False (x) True will be printed followed by ValueError: substring not found ( ) True will be printed followed by TypeError: find() takes 1 argument (2 given) Answer >>> * .sort(), sorted(), .index(), .find(), .rfind() What is the output of the following code? `t = "Spam Ham"` `print(t.rfind( "am" ) == t.find( "am" ))` `print(t.rfind( "am" , 3 ) == t.find( "am" , 3 ))` `print(t.rfind( "am" , -3 ) == t.find( "am" , -3 ))` ( ) False False False (x) False True True ( ) True True True ( ) True will be printed followed by TypeError: rfind takes 1 argument (2 given) Answer >>>	.index() -> jika tidak ditemukan maka ValueError .find() & .rfind() -> return -1
UTF-8 is: ( ) a synonym for *byte* (x) a form of encoding Unicode code points ( ) the 9th version of the UTF standard ( ) a Python version name	`UTF – 8` is `a form of encoding Unicode code points`
`print('Anre' > "Anrea")` `False` `print('2Anre' > "1Anrea")` `True`	pada string, yang terpanjang yang lebih besar namun jika ada angka, akan di bandingkan angka paling awal
What will be printed in the following code? `spam = """"""""` `ham = """"` `""""` `print(spam, ham)` ( ) Syntax Error ( ) Two empty strings (x) An empty string and a new line character ( ) Two new line character Answer >>>	

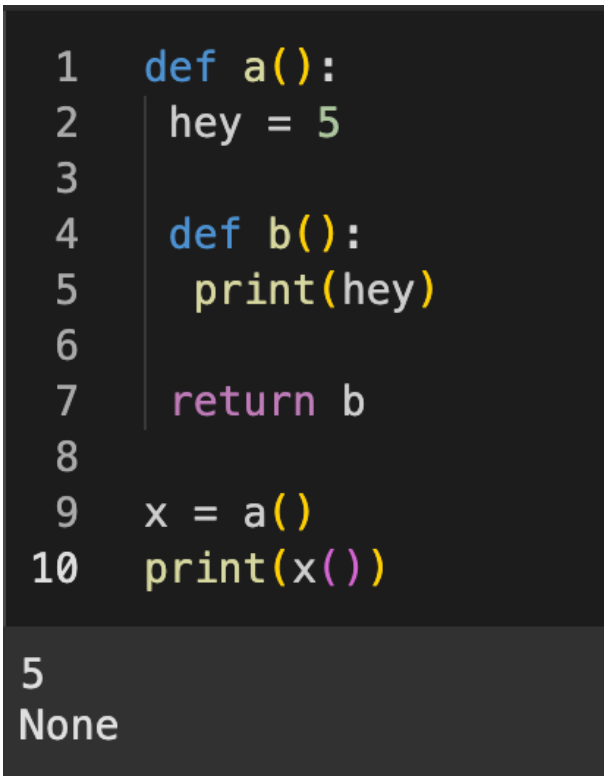
Soal	Keterangan
s = 'Python' ( ) print(s[0] + s[-1]) ( ) print(s[::5]) ( ) print(s[::-5]) ( ) print(s[::-1][::-5]) Answer >>>	step `-5` berarti membaca dari index terakhir dengan step 5 -> `nP` sedangkan step 5 -> `Pn`
	string kosong itu termasuk kedalam string apapun
	`open() as f` ini mengembalikan `object` bukan `content`, jadi tidak bisa diiterasi untuk melakukan iterasi lakukan `read` dahulu
What is the output of the following code? >>> "/" .join({ "Month" : "12" , "Day" : "25" , "Year" : "2021" }) ( ) 12/25/2021 ( ) Month/Day/Year ( ) Month/12/Day/25/Year/2021 ( ) TypeError: can only join an iterable Answer >>> What is the output of the following code? >>> "XYZ" .join("123") ( ) XYZ123 ( ) 123XYZ ( ) 1XYZ2XYZ3 ( ) X123Y123Z ( ) TypeError: can only join an iterable	.join pada dict hanya akan mengambil `key`
	menghasilkan string kosong dan panjang list sebanyak `/`

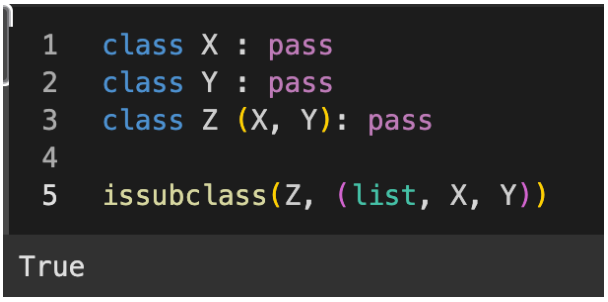
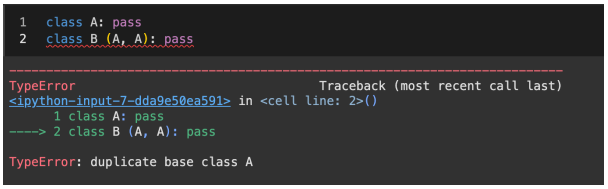
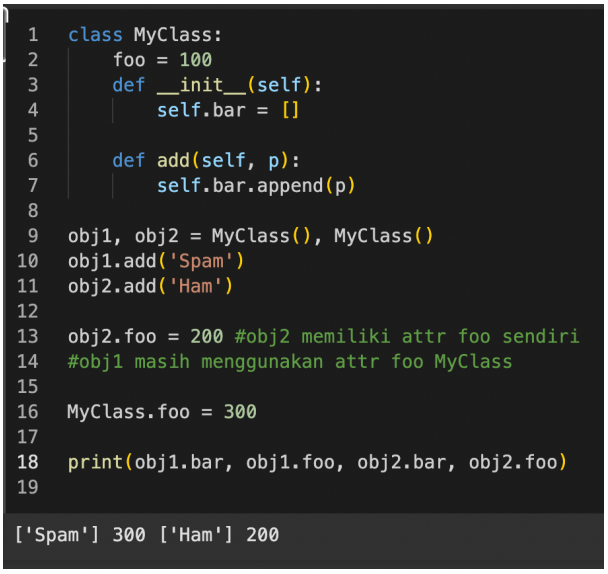
OOP

Soal	Keterangan
What is the output of the following code? `class Foo :` `  bar = 'spam'` `f1 = Foo()` `f2 = Foo()` `f2.bar = 'ham'` `Foo.bar = 'eggs'` `print(f1.bar, f2.bar, Foo.bar)` ( ) spam ham eggs ( ) eggs ham eggs ( ) eggs eggs eggs	Jika instance tidak melakukan rewrite `bar` maka `bar` akan mengambil attr kelas
`issubclass(classA, classA)` will return `True` `isinheritance(classA, classA)` will return `True`	
	because when modify string, python will make a different reff memory `is` used to compare 2 object memory
	dua instance pasti memiliki beda referensi memori
	sebaiknya dalam membuat urutan exception dari exception yang paling spesifik baru ke yang paling luas dan untuk `except` harus di akhir

Soal	Keterangan
	
	`e.args` -> tuple
	menghasilkan hierarchy error. Cara buat exception hanya melakukan inheritance dari error paling bawah
	`self.args` akan mengoverride msg di instance
	type sudah benar `str` hanya value yang salah
JANGAN GUNAKAN `assert` dalam production	dengan perintah `-0` ketika run program di CLI maka semua `assert` akan unactive
	`lambda` bisa di assign ke variable

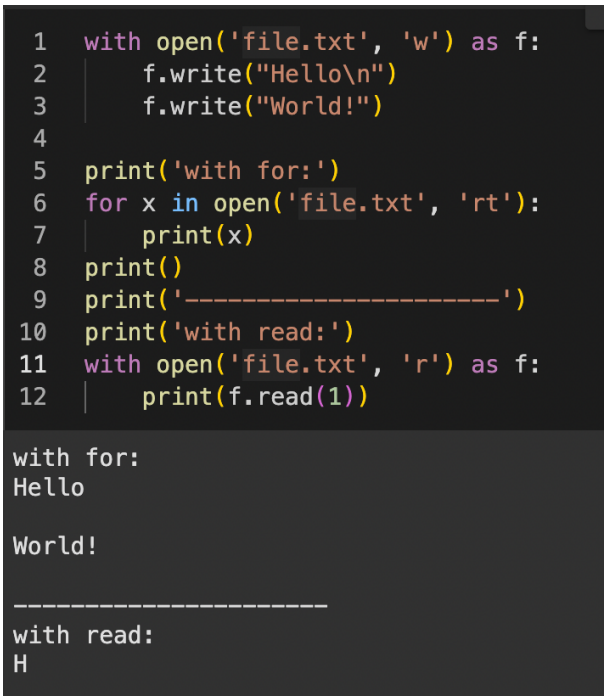
Soal	Keterangan
	pendekatan terbaik untuk return menggunakan get(), bukan menggunakan index. jika menggunakan index, ketika key tidak ada maka akan error, sedangkan jika dengan get() itu akan mengembalikan nilai default yaitu 0
	A -> kelas A() -> instance
	obj2 merubah value obj1 karena merujuk pada memori yang sama
	A() adalah instance jadi memiliki c Cara baca: `Apakah A() memiliki attr 'c'`

Soal	Keterangan
 	karena tidak ada return maka default mengembalikan None
`isinstance(obj, cls)`	**hanya berlaku di instance (obj)** Mengecek apakah suatu **objek** adalah instance dari suatu kelas atau subclass.
`issubclass(cls1, cls2)`	**hanya berlaku di kelas** Mengecek apakah suatu kelas adalah subclass dari kelas lain.
What is the output of the following code? **class Ham** : **def __init__** (self): self.v1 = 1 **class Spam** (Ham): **def __init__** (self): self.v2 = 2 s = Spam() print(s.v1,s.v2) ( ) 0 2 ( ) 1 2 ( ) Invalid Syntax ( ) AttributeError: 'Spam' object has no attribute 'v1' Answer ~~~	ketika mendeklarasikan `__init__` sendiri maka untuk memunculkan attr pada kelas induk harus menggunakan `super().__init__()` atau `Ham.__init__(self)`

Soal	Keterangan
	`foo` disimpan ke bar tanpa di eksekusi, hanya menyimpan referensi sedangkan jika `foo()` akan error karena ketika menyimpan ke bar, `foo()` akan ter eksekusi
	Apakah `Z` adalah salah satu subclass dari tuple(list, X, Y) - bukan subclass dari `list` - subclass dari `X` - subclass dari `Y`
	can't duplicate
	setiap instance memiliki attr sendiri, ketika tidak mengoverwritte attr kelas maka akan selalu menggunakan value pada attr kelas

Miscellaneous

Soal	Keterangan
``python import calendar c = calendar.Calendar() for weekday in c.iterweekdays(): print(weekday, end=" ") ``` ``` 0 1 2 3 4 5 6 ```	akan menghasilkan dari 0
``python from datetime import date, datetime date_1 = date(1992, 1, 16) date_2 = date(1991, 2, 5) print(date_1 - date_2) datetime1 = datetime(1992, 1, 16, 11, 11, 11) datetime2 = datetime(1991, 2, 5) print(datetime1 - datetime2) ``` ``` 345 days, 0:00:00 345 days, 11:11:11 ```	jika hari = 0, maka tidak muncul ```python from datetime import date, datetime date_1 = date(1992, 1, 16) date_2 = date(1991, 2, 5) print(date_1 - date_2) datetime1 = datetime(1992, 1, 16, 11, 11, 11) datetime2 = datetime(1992, 1, 16) print(datetime1 - datetime2) ``` ``` 345 days, 0:00:00 11:11:11 ```
``python import os os.mkdir('thumbnails') os.chdir('thumbnails') sizes = ['small', 'medium', 'large'] for size in sizes: os.mkdir(size) print(os.listdir()) ``` ``` PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL (.venv) naufalnashif@MacBook-Air-Naufal python- /Users/naufalnashif/Desktop/python-dev/main.py ['large', 'medium', 'small'] (.venv) naufalnashif@MacBook-Air-Naufal python- ```	bakal diurutkan sesuai abjad `['large', 'medium', 'small']` dengan urutan abjad : `a, b, ..., l, m, ..., s, ..., z`
``python import os os.mkdir('pictures') os.chdir('pictures') os.mkdir('thumbnails') os.chdir('thumbnails') os.mkdir('tmp') os.chdir('../') print(os.getcwd()) ``` ``` /content/pictures ```	sudah kembali ke path `/pictures` dengan perintah `os.chdir(../)`

Soal	Keterangan
Select the true statements. (Select two answers) The `lambda` function can accept **a maximum of two** arguments ✓ The `lambda` function can accept **any number** of arguments The `lambda` function can evaluate **multiple** expressions ✓ The `lambda` function can evaluate **only one** expression	`lambda arguments (bisa banyak): expression (only one)` `lambda x , y, z : x + y + z`
	menggunakan `for` akan membaca line by line sama seperti `.readline` sedangkan menggunakan `.read` akan membaca karakter demi karakter • `.readline()` : Membaca **line demi line** hingga karakter newline atau EOF. • `.read(1)` : Membaca **karakter demi karakter**. • `.readlines()` : Membaca **semua baris** sekaligus, mengembalikannya sebagai list of strings.
What information can be read using the `uname` function provided by the `os` module? (Select **two** answers) Last login date ✓ Hardware identifier ✓ Operating system name Current path	`os.uname` hanya ada di unix/linux
Ya, data biner yang diberikan **(Hexadecimal):** `0x01 0x02 0x03 0x04` terdiri dari **4 byte**. • **Penjelasan**: • Setiap nilai dalam format **hexadecimal** seperti `0x01`, `0x02`, `0x03`, dan `0x04` mewakili **1 byte**. • Total ada 4 nilai, sehingga ukurannya adalah **4 byte**. • Dalam Python, Anda dapat membuat buffer yang sesuai dengan ukuran ini menggunakan `bytearray(4)`.	`bytearray(4)` -> membuat array dengan panjang 4 byte

Thank You !!