Extra class 1

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MCQ data variable

• Remove incorrect characters in the name of the variable

```
1_of_my-variable! = "test"
```

• What is the value of the following statement ?

print(5>1)

• What is the value of the following statement ?

```
print(5>1)
```

True

• What is the value of the following statement ?

```
print(5 == 1)
```

• What is the value of the following statement ?

```
print(5 == 1)
```

False

• What is the value of the following statement ?

print(5 < 1)

• What is the value of the following statement ?

```
print(5 < 1)
```

False

• What is the value of the following statement ?

```
print(bool("abc"))
```

• What is the value of the following statement ?

```
print(bool("abc"))
```

True

• What is the value of the following statement ?

print(bool(0))

• What is the value of the following statement ?

print(bool(0))

False

• What is the value of the following statement ?

print(bool(1))

• What is the value of the following statement ?

```
print(bool(1))
```

True

MCQ data type

• What will be printed from the following examples ?

```
x = 5
print(type(x))
x = "Hello World"
print(type(x))
x = 20.5
print(type(x))
x = ["cat", "dog", "horse"]
print(type(x))
x = ("cat", "dog", "horse")
print(type(x))
x = {"name" : "John", "lastname" : "Doe", "age" : 33}
print(type(x))
x = True
```

print(type(x))

• Get the first character of the string txt

```
txt = "Hello World"
x = ?
```

• Get the first character of the string txt

```
txt = "Hello World"
x = txt[0]
print(x)
```

H

• Get the character from index 2 to 4 (IIo)

```
txt = "Hello World"
x =
```

• Get the character from index 2 to 4 (IIo)

```
txt = "Hello World"
x = txt[2:5]
print(x)
```

11o

• Return the string without any whitespace at the beginning

```
txt = " Hello World"
x =
```

• Return the string without any whitespace at the beginning

```
txt = " Hello World"
print(txt)
   Hello World
x = txt[1:]
print(x)
## Hello World
y = txt.strip()
print(y)
## Hello World
```

• Convert the text in upper case

```
txt = "Hello World"
x =
```

• Convert the text in upper case

```
txt = "Hello World"
x = txt.upper()
print(x)
```

HELLO WORLD

Convert the text in lower case

```
txt = "Hello World"
x =
```

Convert the text in lower case

```
txt = "Hello World"
x = txt.lower()
print(x)
```

hello world

• Replace H by J

```
txt = "Hello World"
x =
```

Replace H by J

```
txt = "Hello World"
x = txt.replace("H", "J")
print(x)
```

Jello World

• Use the correct membership operator to check if "cat" is present in the animal object.

```
animal = ["cat", "dog"]
if "cat"
```

• Use the correct membership operator to check if "cat" is present in the animal object.

```
animal = ["cat", "dog"]
if "cat" in animal:
  print("Yes, cat is a animal!")
```

Yes, cat is a animal!

• Use the correct comparison operator to check if 5 is not equal to 1.

if

 \bullet Use the correct comparison operator to check if 5 is not equal to 1.

```
if 5 != 10:
   print("5 and 10 is not equal")
```

```
## 5 and 10 is not equal
```

• Use the correct logical operator to check if at least one of two statements is True.

```
if 5 == 10 ?? 4 == 4:
    print("At least one of the statements is true")
```

• Use the correct logical operator to check if at least one of two statements is True.

```
if 5 == 10 or 4 == 4:
    print("At least one of the statements is true")

## At least one of the statements is true

if (5 == 10) | (4 == 4):
    print("At least one of the statements is true")
```

At least one of the statements is true

MCQ List 1

• Print the third item in the fruits list.

```
animal = ["cat", "dog", "horse"]
print()
```

MCQ List 1

• Use the correct logical operator to check if at least one of two statements is True.

```
animal = ["cat", "dog", "horse"]
print(animal[2])
```

horse

MCQ List 2

• Change the value from "cat" to "lion", in the fruits list.

```
animal = ["cat", "dog", "horse"]
```

• Change the value from "cat" to "lion", in the fruits list.

```
animal = ["cat", "dog", "horse"]
animal[0] = "lion"
print(animal)
```

```
## ['lion', 'dog', 'horse']
```

• Add cow to the animal list

animal = ["cat", "dog", "horse"]

Add cow to the animal list

```
animal = ["cat", "dog", "horse"]
animal.append("cow")
print(animal)
```

```
## ['cat', 'dog', 'horse', 'cow']
```

• remove dog to the animal list

```
animal = ["cat", "dog", "horse"]
```

• remove dog to the animal list

```
animal = ["cat", "dog", "horse"]
animal.remove("dog")
print(animal)
```

```
## ['cat', 'horse']
```

• Use negative indexing to print the last item in the list.

```
animal = ["cat", "dog", "horse"]
```

• Use negative indexing to print the last item in the list.

```
animal = ["cat", "dog", "horse"]
print(animal[-1])
```

horse

• Use the correct syntax to print the number of items in the list.

```
animal = ["cat", "dog", "horse"]
```

• Use the correct syntax to print the number of items in the list.

```
animal = ["cat", "dog", "horse"]
print(len(animal))
```

3

• Use a range of indexes to print the third, fourth, and fifth item in the list.

```
animal = ["cat", "dog", "horse"]
```

• Use a range of indexes to print the third, fourth, and fifth item in the list.

```
animal = ["cat", "dog", "horse"]
print(animal[2:5])
```

```
## ['horse']
```

• Use the get method to print the value of the "model" key of the car dictionary.

```
car = {
   "brand": "Ford",
   "model": "Mustang",
   "year": 1964
}
print()
```

• Use the get method to print the value of the "model" key of the car dictionary.

```
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
print(car.get("model"))
```

Mustang

Change the "year" value from 1964 to 2023.

```
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
```

Change the "year" value from 1964 to 2023.

```
car = {
   "brand": "Ford",
   "model": "Mustang",
   "year": 1964
}
car["year"]=2023
print(car)

## {'brand': 'Ford', 'model': 'Mustang', 'year': 2023}
```

Add the key/value pair "color" : "red" to the car dictionary.

```
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
```

Add the key/value pair "color": "red" to the car dictionary.

```
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
car["color"]="red"
print(car)

## {'brand': 'Ford', 'model': 'Mustang', 'year': 1964, 'color': 'red'}
```

Use the pop method to remove "model" from the car dictionary.

```
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
```

Use the pop method to remove "model" from the car dictionary.

```
car = {
   "brand": "Ford",
   "model": "Mustang",
   "year": 1964
}
car.pop("model")

## 'Mustang'
print(car)
```

{'brand': 'Ford', 'year': 1964}

Use the clear method to empty the car dictionary.

```
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
```

Use the clear method to empty the car dictionary.

```
car = {
   "brand": "Ford",
   "model": "Mustang",
   "year": 1964
}
car.clear()
print(car)

## {}
```

• Print "Yes" if a is equal to b, otherwise print "No".

$$a = 50$$

$$b = 10$$

• Print "Yes" if a is equal to b, otherwise print "No".

```
a = 50
b = 10
if a == b:
    print("Yes")
else:
    print("No")
```

No

Print "Hello" if a is equal to b, and c is equal to d.

$$a = 50$$

$$b = 10$$

$$c = 30$$

$$d = 30$$

Print "Hello" if a is equal to b, and c is equal to d.

```
a = 50
b = 10
c = 30
d = 30
if a == b and c==d:
    print("Hello")
```

Loop through the items in the animal list.

Loop through the items in the animal list.

```
animal = ["cat", "dog", "horse"]
for idx in animal:
    print(idx)
```

```
## cat
## dog
## horse
```

In the loop, when the item value is "dog", jump directly to the next item.

```
animal = ["cat", "dog","horse"]
for idx in animal:
   if idx == "dog":
        ?????
   print(idx)
```

In the loop, when the item value is "dog", jump directly to the next item.

```
animal = ["cat", "dog", "horse"]
for idx in animal:
  if idx == "dog":
    continue
  print(idx)
```

```
## cat
## horse
```

Use the range function to loop through a code set $5\ \text{times}.$

```
for x in ????? :
  print(x)
```

Use the range function to loop through a code set $5\ \mathrm{times}.$

```
for x in range(5) :
  print(x)
```

```
##
##
##
##
```

• Print i as long as i is less than 5.

i = 1

• Print i as long as i is less than 5.

```
i = 1
while i < 5:
    print(i)
    i += 1

## 1
## 2
## 3
## 3</pre>
```

• Exit the loop if i = 3

```
i = 1
while i < 5:
    i += 1
    if i == 3:
        ?????
    print(i)</pre>
```

 \bullet Exit the loop if i=3

```
i = 1
while i < 5:
    i += 1
    if i == 3:
        break
print(i)</pre>
```

2

MCQ Function 1

• Create a function named my_function.

```
??????:
print("Hello from a function")
```

• Create a function named my_function.

```
def my_function():
    print("Hello from a function")
```

• Let the function return the x parameter + 5.

```
var = 5
def my_function(x):
    ???????
my_function(var)
```

• Let the function return the x parameter + 5.

```
def my_function(x):
    return x+5
my_function(var)
## 10
```

var = 5

• If you do not know the number of arguments that will be passed into your function, there is a prefix you can add in the function definition, which prefix?

```
def my_function(???kids):
   print("The youngest child is " + kids[2])
```

• If you do not know the number of arguments that will be passed into your function, there is a prefix you can add in the function definition, which prefix?

```
def my_function(*kids):
    print("The youngest child is " + kids[2])
```

• If you do not know the number of keyword arguments that will be passed into your function, there is a prefix you can add in the function definition, which prefix?

```
def my_function(???kids):
   print("The youngest child is " + kids[2])
```

• If you do not know the number of keyword arguments that will be passed into your function, there is a prefix you can add in the function definition, which prefix?

```
def my_function(**kid):
    print("His last name is " + kid["lname"])
```

• What is the correct syntax to import a module named "mymodule"?

??? my_module

• What is the correct syntax to import a module named "mymodule"?

import my_module

• If you want to refer to a module by using a different name, you can create an alias.

What is the correct syntax for creating an alias for a module?

import mymodule ?? mx

• If you want to refer to a module by using a different name, you can create an alias.

What is the correct syntax for creating an alias for a module?

import mymodule as mx

 What is the correct syntax of printing all variables and function names of the "random" module?

import random
print(????)

• What is the correct syntax of printing all variables and function names of the "mymodule" module?

```
import random
print(dir(random))
```

```
## ['BPF', 'LOG4', 'NV_MAGICCONST', 'RECIP_BPF', 'Random', 'SG_MAGICCONST', 'SystemRandom
', 'TWOPI', '_Sequence', '_Set', '__all__', '__builtins__', '__cached__', '__doc__',
'__file__', '__loader__', '__name__', '__package__', '__spec__', '_accumulate', '
_acos', '_bisect', '_ceil', '_cos', '_e', '_exp', '_floor', '_inst', '_log', '_os', '
_pi', '_random', '_repeat', '_sha512', '_sin', '_sqrt', '_test', '_test_generator', '
_urandom', 'warn', 'betavariate', 'choice', 'choices', 'expovariate', 'gammavariate
', 'gauss', 'getrandbits', 'getstate', 'lognormvariate', 'normalvariate', '
paretovariate', 'randbytes', 'randint', 'random', 'randrange', 'sample', 'seed', '
setstate', 'shuffle', 'triangular', 'uniform', 'vonmisesvariate', 'weibullvariate']
```

• What is the correct syntax of importing only the randint function of the "random" module?

??? random ??? randint

• What is the correct syntax of importing only the randint function of the "random" module?

from random import randint