MCQ

1) **What will be the output of the following code snippet?**

def func(a, b):

return b if a == 0 else func(b % a, a)

print(func(30, 75))

a) 10

b) 20

c) 15

d) 0

Answer :- c) 15.

'func(30,75)' as **'a'** is not 0, so it makes recursive call **'(70 % 30,30)'** which is **'func(15,30)'**.

'func(15,30)' again **'a'** is not 0, so it again makes recursive call **'(30 % 15,15)'** which is **'func(0,15)'**.

'func(0,15)' now **'a'** is 0, it returns the value of **'b'** which is **15**.

2) **numbers = (4, 7, 19, 2, 89, 45, 72, 22)**
sorted_numbers = sorted(numbers)
even = lambda a: a % 2 == 0
even_numbers = filter(even, sorted_numbers)
print(type(even_numbers))

a) Int
b) Filter
c) List
d) Tuple

Answer :- b) Filter.

In this case Lambda function is use to filter the even numbers from sorted numbers.

3) As what datatype are the *args stored, when passed into

a) Tuple

b) List

c) Dictionary

d) none

Answer :- a) Tuple.

*args allow a function to take any number of positional arguments. The parameters passed to the addition function are stored in a tuple.

4) set1 = {14, 3, 55}

set2 = {82, 49, 62}

set3={99,22,17}

print(len(set1 + set2 + set3))

a) 105

b) 270

c) 0

d) Error

Answer :- d) Error.

The + operator to concatenate sets directly. The code **set1 + set2 + set3** will result in a Error.

5) What keyword is used in Python to raise exceptions?
a) raise
b) try
c) goto
d) except.

Answer :- a) raise.

The **'raise'** keyword is used in python to raise exception.

6) Which of the following modules need to be imported to handle date time computations in Python?
a) timedate
b) date
c) datetime
d) time

Answer :- c) datetime.

The 'datetime' modules need to be imported to handle date and time computations in python.

7) What will be the output of the following code snippet?
print(43 + (7 + 5)**(1 + 1))**

a) 248

b) 169

c) 208

d) 233

Answer :- c) 208.

(4**3 + (7 + 5)**(1 + 1))

(64+ (7 + 5)**(1 + 1))

(64 + (12)**(1 + 1))

(64 + (12)**(2))

(64 + (12)**(2))

(64 + 144)

(208)

8) Which of the following functions converts date to corresponding time in Python?

a) strptime

b) strftime

c) both a) and b)

d) None.

Answer :- c) both a) and b)

Both **strptime** and **strftime** functions converts date to corresponding time in Python.

9) The python tuple is _____ in nature.

a) mutable

b)immutable

c)unchangeable

d) none

Answer :- b) immutable.

The python tuple is immutable in nature. Once a tuple is created its elements or size cannot be modified.

MCQ

10) The ___ is a built-in function that returns a range object that consists series of integer numbers, which we can iterate using a for loop.

A. range()

B. set()

C. dictionary{}

D. None of the mentioned above

Answer :- A. range()

The **range ()** is a built-in function that returns a range object that consists series of integer numbers, which we can iterate using a for loop.

11) Amongst which of the following is a function which does not have any name?

A. Del function

B. Show function

C. Lambda function

D. None of the mentioned above

Answer :- C. Lambda function

The Lambda function is an anonymous function.

12) The module Pickle is used to ___.

A. Serializing Python object structure

B. De-serializing Python object structure

C. Both A and B

D. None of the mentioned above

Answer :- C. Both A and B.

The module Pickle is used to **Serializing Python object structure** and **De-serializing Python object structure.**

MCQ

13) Amongst which of the following is / are the method of convert Python objects for writing data in a binary file?

A. set() method

B. dump() method

C. load() method

D. None of the mentioned above.

Answer :- B. dump() method

The **dump() method** is the method of convert Python objects for writing data in a binary file.

14) Amongst which of the following is / are the method used to unpickling data from a binary file?

A. load()

B. set() method

C. dump() method

D. None of the mentioned above.

Answer :- A. load().

The **load()** method is the method used to unpickling data from a binary file.

15) A text file contains only textual information consisting of ___.

A. Alphabets

B. Numbers

C. Special symbols

D. All of the mentioned above.

Answer :- D. All of the mentioned above.

A text file contains only textual information consisting of Alphabets, Numbers, Special Symbols.

MCQ

16) Which Python code could replace the ellipsis (...) below to get the following output? (Select all that apply.)

captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko", }

Enterprise Picard, Voyager Janeway Defiant Sisko

a) for ship, captain in captains.items(): print(ship, captain)

b) for ship in captains: print(ship, captains[ship])

c) for ship in captains: print(ship, captains)

d) both a and b

Answer :- d) both a and b.

The '**for ship, captain in captains.items(): print(ship, captain)'** and '**for ship in captains: print(ship, captains[ship])'** could replace the ellipsis.

17) Which of the following lines of code will create an empty dictionary named captains?

a) captains = {dict}

b) type(captains)

c) captains.dict()

d) captains = {}

Answer:- d) captains = {}

The **captains = {}** will create an empty dictionary named captains.

18) Now you have your empty dictionary named captains. It's time to add some data! Specifically, you want to add the key-value pairs "Enterprise": "Picard", "Voyager": "Janeway", and "Defiant": "Sisko". Which of the following code snippets will successfully add these key-value pairs to the existing captains dictionary?

a) captains{"Enterprise" = "Picard"}

captains{"Voyager" = "Janeway"}

captains{"Defiant" = "Sisko"}

b) captains["Enterprise"] = "Picard"

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captains["Voyager"] = "Janeway"

captains["Defiant"] = "Sisko"

c) captains = { "Enterprise": "Picard",

"Voyager": "Janeway",

"Defiant": "Sisko", }

d) None of the above

Answer :- b) captains["Enterprise"] = "Picard"

captains["Voyager"] = "Janeway"

captains["Defiant"] = "Sisko"

The **'[]'** is used to add or update Key -values pairs to the dictionary.

19) You're really building out the Federation Starfleet now! Here's what you have:

captains = {

"Enterprise": "Picard",

"Voyager": "Janeway",

"Defiant": "Sisko",

"Discovery": "unknown",

}Now, say you want to display the ship and captain names contained in the dictionary, but you also want to provide some additional context. How could you do it?

a) for item in captains.items(): print(f"The [ship] is captained by [captain].")

b) for ship, captain in captains.items(): print(f"The {ship} is captained by {captain}.")

c) for captain, ship in captains.items(): print(f"The {ship} is captained by {captain}.")

d) All are correct

Answer :- b) for ship, captain in captains.items(): print(f"The {ship} is captained by {captain}.")

The Enterprise is captained by Picard. The Voyager is captained by Janeway. The Defiant is captained by Sisko. The Discovery is captained by unknown.

MCQ

20) You've created a dictionary, added data, checked for the existence of keys, and iterated over it with a for loop. Now you're ready to delete a key from this dictionary:

captains = {

"Enterprise": "Picard",

"Voyager": "Janeway",

"Defiant": "Sisko",

"Discovery": "unknown",

} What statement will remove the entry for the key "Discovery"?

a) del captains

b) captains.remove()

c) del captains["Discovery"]

d) captains["Discovery"].pop()

Answer :- c) del captains["Discovery"]

The **'del captains["Discovery"]'** will remove the entry for the key **"Discovery".**