Name :Vivek kumar Chauhan

Position : Interns -Data Science

Github link : https://github.com/Vivekchauhan-web/Internship.git

MCQ Question:

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
Explanation: Here the problem is based on recursive function of finding GCD of two number .call the function recursively till the value of a becomes 0 and at that time the value of b 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: Filter

Explanation: sorted() method sort the element of any iterable object passed into it .Here lambda function is operated on element of tuple object and return even number .filter () is a method that will filter out the element by applying lambda function to each individual element. Here even_number variable will hold filter type object. To display the element in the form of list and tuple we need to use print(tuple(even-numbers)

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

a) Tuple

b) List

c) Dictionary

d) none

Answer : b) List
Explanation :*args is non keword argument and store argument in the form of list.

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 (+ operator is not applicable for sets as sets are unique and unordered collection)

5) What keyword is used in Python to raise exceptions?

a) raise

b) try

c) goto

d) except

Answer : a) raise

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

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) - parenthesis part will evaluate first and then exponential operator will work.

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 : d) None

Explanation : if the date is in string format then we will use the above method to convert date to corresponding time .

9) The python tuple is _____ in nature.

a) mutable

b) immutable

c) unchangeable
d) none

Answer: b) immutable

Explanation: Tuple is data type in python that is once created cannot be change.

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()

Question 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

Question 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

Question 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

Question 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() method

Question 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

Question 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",
}
```

ard,

aneway

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

Question **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 = {}

Answers :d : 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" captains["Voyager"]

= "Janeway" captains["Defiant"] = "Sisko"

c) captains = {

"Enterprise": "Picard",

"Voyager": "Janeway",

"Defiant": "Sisko",

}

d) None of the above

Answer : c

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

y",

"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) is correct .

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:

y",

"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”]