



ASSIGNMENT 1

Batch DS2306

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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) 15

Question 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

Question 3:

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

- a) Tuple
- b) List
- c) Dictionary
- d) none

Answer: a) Tuples

Question 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

Question 5:

What keyword is used in Python to raise exceptions?

- a) raise
- b) try
- c) goto
- d) except

Answer: a) raise

Question 6:

Which of the following modules need to be imported to handle date time computations in Python?

- a) timedata
- b) date
- c) datetime
- d) time

Answer: c) datetime

Question 7:

What will be the output of the following code snippet?

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

- a) 248
- b) 169
- c) 208
- d) 233

Answer: c) 208

Question 8:

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

- a).strptime
- b) strptime
- c) both a) and b)
- d) None

Answer: a).strptime()

Question 9:

The python tuple is _____ in nature.

- a) mutable
- b) immutable
- c) unchangeable
- d) none

Answer: b) immutable and c) unchangeable

Question 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()

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: a) Alphabets

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",  
}
```

```
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

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 = {}`

Answer: d) `captains = {}`

Question 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) `captains = {`

```
    "Enterprise": "Picard",  
    "Voyager": "Janeway",  
    "Defiant": "Sisko",  
}
```

Question 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: d) All are correct

Question 19:

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: d) del captains["Discovery"]