

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:

func(30, 75);

Since $a \neq 0$, it calls `func(75 % 30, 30)`.

$75 \% 30 = 15$, so it becomes `func(15, 30)`.

func(15, 30);

Since $a \neq 0$, it calls `func(30 % 15, 15)`.

$30 \% 15 = 0$, so it becomes `func(0, 15)`.

func(0, 15);

Since $a == 0$, it returns 15.

the output of `print(func(30, 75))` is 15 (C).

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

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

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

Answer:

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 this is because + cannot be used to add sets union() or | operator can be used

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

Answer:

c.datetime

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:

$43 = 4^3 = 4 \times 4 \times 4 = 64$**

$7+5=12$

$1+1=2$

So, $(7+5)^{(1+1)} = 12^2 = 144$

Add result $64+144=208$

c.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:

b.strftime

9) The python tuple is _____ in nature.

a) mutable

b)immutable

c)unchangeable

d) none

Answer:

b.immutable

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.Lamda 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;

A. Serializing Python object structure

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

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()

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

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;

b) for ship in captains:

print(ship, captains[ship])

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 = {}

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",
```

```
}
```

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;

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

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"]