

D1—1

01-May-2023

Batch DS2304

**DEVESH VERMA**

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

**ans-1: c**

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```
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

**ans-2: b**

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

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

**ans -3: a**

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```
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

**ans-4: d**

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

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

**ans-5: a**

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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

**ans-6: c**

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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

**ans-7: c**

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

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

**ans-8: b**

9) The python tuple is \_\_\_\_\_ in nature.

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

**ans-9: b**

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
- 

**ans-10: a**

#### 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
- 

**ans-11: c**

#### 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
- 

**ans-12: c**

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

**ans-13: b**

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**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

**ans-14: a**

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15.

**A text file contains only textual information consisting of \_\_\_\_.**

- A. Alphabets
- B. Numbers
- C. Special symbols
- D. All of the mentioned above

**ans-15: d**

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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

**ans-16: d**

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

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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 = {}

**ans-17: d**

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"`

**ans-18: b**

c) `captains = {`

`"Enterprise": "Picard",`

`"Voyager": "Janeway",`

`"Defiant": "Sisko",`

`}`

d) None of the above

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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
- 

**ans-19: b**

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",  
}
```

**ans-20: c**

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

- a) del captains
- b) captains.remove()
- c) del captains["Discovery"]
- d) captains["Discovery"].pop()