

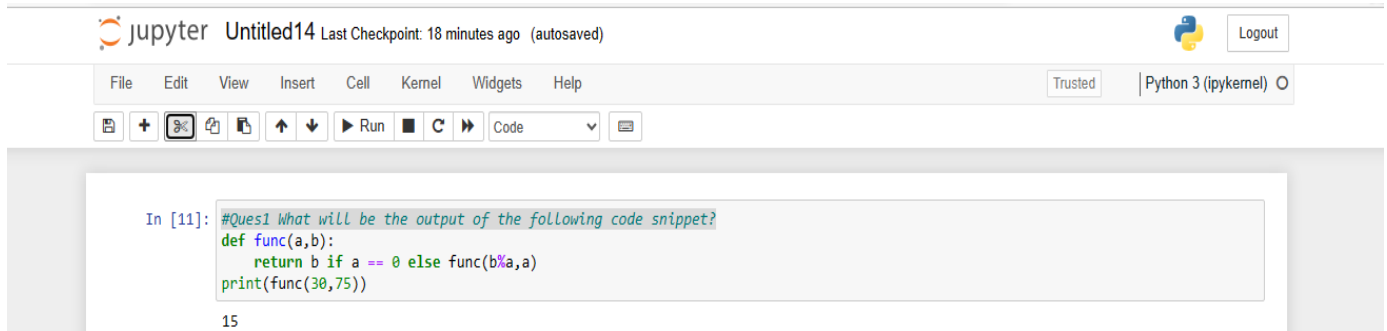
MCQ

Q1.

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
```

Solution:



```
Jupyter Untitled14 Last Checkpoint: 18 minutes ago (autosaved)  
File Edit View Insert Cell Kernel Widgets Help Trusted Python 3 (ipykernel)  
In [11]: #Ques1 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))  
15
```

Correct Answer is 15

Q 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
```

Solution:

```
In [12]: #Ques2  
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))  
<class 'filter'>
```

Correct Answer is Filter

Q 3

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

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

Solution:

Tuple: The *args are stored as a tuple.

Correct Answer is **Tuple**

Q 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

Solution

```
In [13]: #Ques4
set2 = {82, 49, 62}
set3 = {99, 22, 17}
print(len(set1 + set2 + set3))
```

TypeError Traceback (most recent call last)
Cell In[13], line 4
 2 set2 = {82, 49, 62}
 3 set3 = {99, 22, 17}
----> 4 print(len(set1 + set2 + set3))

TypeError: unsupported operand type(s) for +: 'set' and 'set'

Correct Answer is **Error**

Q 5

What keyword is used in Python to raise exceptions?

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

Correct Answer is **Raise**

Q 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

Correct Answer is **datetime**

Q 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

Solution

```
In [14]: #Ques7 What will be the output of the following code snippet?
print(4**3+(7+5)**(1+1))
```

208

Correct Answer is 208

Q 8

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

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

Correct Answer is **strptime**

Q 9

The python tuple is _____ in nature.

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

Correct Answer is **immutable**

Q 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

Correct answer is **range()**

Q 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

Correct answer is **Lambda Function**

Q 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

Correct answer is **Both A and B**

Q 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

Correct answer is **dump() method**

Q 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

Correct answer is **load()**

Q 15

A text file contains only textual information consisting of ____.

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

Correct answer is **All of the mentioned above**

Q 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

Solution

```
In [15]: #Ques16 Which Python code could replace the ellipsis (...) below to get the following output? (Select all that apply.)  
captains = {  
    "Enterprise": "Picard",  
    "Voyager": "Janeway",  
    "Defiant": "Sisko",  
}  
  
for ship, captain in captains.items():  
    print(ship, captain, end=" ", "  
Enterprise Picard, Voyager Janeway, Defiant Sisko,
```

Correct Answer is **for ship, captain in captains.items():
 print(ship, captain)**

Q 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 = {}

Correct Answer is **captains={}**

Q 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

Correct Answer is `captains["Enterprise"] = "Picard"`
`captains["Voyager"] = "Janeway"`
`captains["Defiant"] = "Sisko"`

Q 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

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

Q 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()

Correct Answer is **del captains["Discovery"]**