1.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

In [2]:
```
def func(a, b):
    return b if a == 0 else func(b % a, a)

print(func(30, 75))
```

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) run this code

In [3]:
```
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'>
```

3.As what datatype are the *args stored, when passed into a) Tuple b) List c) Dictionary d)none

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

d)Error

5.What keyword is used in Python to raise exceptions? a) raise b) try c) goto d) except

In [ ]:
```
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

c)Datatime

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

In [11]:
```
print(4**3 + (7 + 5)**(1 + 1))
```

```
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

In [ ]:
```

```

1. The python tuple is _ in nature. a) mutable b)immutable c)unchangeable d) none

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

Range funcation

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

Lambda

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

C. Both A and B

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

dump()

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

load()

15.A text file contains only textual information consisting of ___. A. Alphabets B. Numbers C. Special symbols D. All of the mentioned above

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

In [2]:
```
captains = {
 "Enterprise": "Picard",
 "Voyager": "Janeway",
 "Defiant": "Sisko",}

for ship in captains:
    print(ship, captains[ship])
```

```
Enterprise Picard
Voyager Janeway
Defiant Sisko
```

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 = {}

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

In [5]:
```
captains = {}  # Creating an empty dictionary

# Adding key-value pairs
captains["Enterprise"] = "Picard"
captains["Voyager"] = "Janeway"
captains["Defiant"] = "Sisko"

# Printing the updated dictionary
print(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?

In [7]:
```
captains = {
    "Enterprise": "Picard",
    "Voyager": "Janeway",
    "Defiant": "Sisko",
    "Discovery": "unknown",
}

for ship, captain in captains.items():
    print(f"The captain of the {ship} is Captain {captain}.")
```

```
The captain of the Enterprise is Captain Picard.
The captain of the Voyager is Captain Janeway.
The captain of the Defiant is Captain Sisko.
The captain of the Discovery is Captain unknown.
```

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()

In [6]:
```
#del statement followed by the dictionary name and the key you want to remove.
del captains
```

In [3]:
```

```

```
^C

Note: you may need to restart the kernel to use updated packages.
```

In [ ]:
```

```