

MCQ

1. C) 15

The output of this code will be 15 as `func(30,75)` is `a=30` and `b=75`. First function will check if `a=0` and it will give the output as `b` that is 75 but `a=30` so else statement is executed. Else statement says `b%a` and `a`. % sign in python means the remainder of the division of two numbers. Now `a=15` as $(75 \% 30)$ remainder is 15 so `a=15` and `b=30`. Now function again checks if `a = 0` or not. `A=15`, again it will execute the else statement. $(b\%a \text{ and } a)$ $(30\%15)$ and `b=15`. `A=0` as remainder is 0. Now functions executes the return statement which means result is 15.

2. B) Filter

It is a filter as the `filter()` function is used to filter the sorted numbers based on the even function. It returns a filter object that contains only the even numbers from the sorted list. Sorted function is used to sort numbers in ascending order.

3. A) Tuple

When you pass `*args` as a parameter in a function, the arguments are stored as a tuple data type. The `*args` parameter allows you to pass any number of positional arguments to a function, and Python collects all the positional arguments into a tuple.

4. d) Error

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

5. A) Raise

6. c) datetime

In Python, the `datetime` module is used to handle date and time computations.

7. `print(4**3 + (7 + 5)**(1 + 1))`
c) 208

8. d) None

In Python, the `strftime()` function is used to convert a `datetime` object into a string representation of the date and time, and the `strptime()` function is used to parse a string representation of a date and time into a `datetime` object. The correct answer to your question is (d) None, because neither of the given options specifically converts a date to its corresponding time in Python.

9. The python tuple is _____ in nature
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

11. C) Lambda function

A lambda function is a small, anonymous function that can be defined in a single line of code. It is also known as an "anonymous function" because it does not have a name, and can be used inline wherever a function object is expected.

12. The module Pickle is used to ____.

B) Both a and b. Serializing Python object structure and De-serializing Python object structure

13. B and C .

The dump() and load() methods belong to the pickle module in Python and can be used to convert Python objects for writing data in a binary file.

14. A) load

The load() method belongs to the pickle module in Python and is used to unpickle data from a binary file.

15. D) all of the above

A text file contains only textual information consisting of characters, symbols, and formatting such as line breaks and white spaces.

16. a) for ship, captain in captains.items():

```
print(ship, captain)
```

17. a) captains = {} Is the code that will create an empty dictionary.

18. b) captains["Enterprise"] = "Picard"

```
captains["Voyager"] = "Janeway"
```

```
captains["Defiant"] = "Sisko"
```

19. b) for ship, captain in captains.items():

```
print(f"The {ship} is captained by {captain}.")
```

20. c) del captains["Discovery"]