Assignment 1

1/ Ans:- c) 15

Explanation: The function calculates the Greatest Common Divisor of two numbers using recursion. In this case, GCD(30,75) = 15.

2/ Ans:- b) Filter

Explanation: The filter() function sorts through the numbers and picks out the even ones. It returns a special kind of object called a Filter, which holds those even numbers.

3/ Ans:- a) Tuple

Explanation: In python, *args is stored as a tuple. When we pass multiple arguments to a function using *args , they are collected into a single tuple, allowing us to access them as a group.

4/ Ans:- d) Error

Explanation: We can't add sets together using the + operator. Sets are likecollections of unique items, and we can only combine them using special set methods.

5/ Ans:- a) raise

Explanation: In python, the raise keyword is used to intentionally throw an exception.

6/ Ans:- c) datetime

Explanation: The datetime module is the most comprehensive module for handling date and time computations in python.

7/ Ans:- c) 208

Explanation: Because the expression evaluates to 64 + 144, resulting in 208.

8/ Ans:- c) both a) and b)

Explanation: strptime converts string to datetime, and strftime converts datetime to string, including time.

9/ Ans:- b) immutable

10/ Ans:- a) range()

11/ Ans:- c) lambda function

Explanatio: A lambda funvtion is like a small, secret helper, does a simple job and no name needed.

12/ Ans:- a) Serializing python object structure

Explanation: Converts python objects into a byte stream

13/ Ans:- b) dump() method

14/ Ans:- a) load()

15/ Ans:- d) All of the mentioned above

16/ Ans:- d) both a) and b)

It's like- a) For each ship and its captain, print them.

b) For eac ship, print the ship and its captain.

17/ Ans:- d) captains = {}

Explanation: This line creates a new, empty dictionary named captions.

18/ Ans:- b)

We can think of it like adding entries to our notebook.

19/ Ans:- b) for ship, captain in captains.items(): print(f"The {ship} is captained by {captain}.")

This code provides the additional context we wanted, making it clear which ship is captained by which captain.

20/ Ans:- c) del captains["Discovery"]