

The answers for assignment 1

1. c= 15

As the the $b\%a$ step is repeated until the value of $a==0$, once the b modules a is done the reminder value is stored in a and b value is changed to original a value .

2. b=filter

```
even_numbers = filter(even, sorted_numbers)
```

Cuz here, in this line, we changed the data type of the tuple to Filter.

3. a=Tuple

'*Args' syntax is used to pass a variable number of arguments to a function. That are stored in a tuple.

4. d=error

Cuz len takes only one argument at a time.

5. a=raise

'Raise' keyord is used to raise an exception, indicating that an error or exceptional condition has occurred.

6. c= datetime

7. c=208

Its $(4^3+(7+5)^2)$

$(64+(12)^2)$

$64+144$

208

8. `d= none`

The function that converts date to corresponding time in python is 'convert_date_to_time()'

9. `b=immutable`

Tuple are immutable and cannot be modified or reassigned once created.

10 `A=range()`

11. `c=Lambda Funtion`

Lambda function in Python is an anonymous function that does not have a specific name.

12. `C= Both A and B`

Pickle module is used for object serialization and deserialization.

13. `B= Dump()method`

'dump()' method is used to convert python objects into a binary representation and write them to a file.

14 `c=Load()`

'load()' is used to read and 'deserialize' the objects from the file.

15. D= All the above

A text file contains only textual information consisting of, Alphabets, Numbers and special symbols

16. A=

```
for ship, captain in captains.items():  
    print(ship, captain)
```

17. d= captains={}

This creates an empty dictionary named captains.

18. b=

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

c=

```
captains = {  
    "Enterprise": "Picard",  
    "Voyager": "Janeway",  
    "Defiant": "Sisko",  
}
```

Both are correct

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

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

```
20. c=  
del captains["Discovery"]
```

This deletes the ["Discovery"] key-value pairs.