

ASSIGNMENT – 1

DT=27/03/2023

1. 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

Answer:- c) 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))`

a) Int
b) Filter
c) List
d) Tuple

Answer: - b) Filter

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

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

Answer:- 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

Answer: - d) Error

5. What keyword is used in Python to raise exceptions?

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

Answer: - a) 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`

Answer: - a) `timedate`

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

Answer: - c) 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

Answer : - a) `strptime`

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

Answer: - 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()` B. `set()` C. `dictionary{}` D. None of the mentioned above

Answer: - A. `range()`

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

Answer: - C. `Lambda` Function

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

Answer: - 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

Answer: - B. dump () method

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

Answer: - A. load()

15. A text file contains only textual information consisting of ____.

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

Answer: - D. 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

Answer: - d) both a and b

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 = {}`

Answer: - 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

Answers: - c) `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?

- 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

Answer: - b) `for ship, captain in captains.items():`

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

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()`

Answer: - c) `del captains["Discovery"]`