

DATA TRAINED INTERNSHIP

Assignment -1

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

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-D

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

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

answer-A

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.

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

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

answer-A

6. Which of the following modules need to be imported to handle date time computations in Python?

- a) timedata
- b) date
- c) datetime
- d) time

answer-C

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

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-C

9. The python tuple is _____ in nature.

- a) mutable
- b) immutable
- c) unchangeable
- d) none

answer-B

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

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

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

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

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

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

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

answer-A

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-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

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
```

answer-D

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

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