

Assignment 1

MCQ

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 : a) 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) timdate
- b) date
- c) datetime
- d) time

Answer : c) datetime

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 : 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

Answer : 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"]`