

## 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

Ans :- (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

Ans:- (b) Filter

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

- a) Tuple
- b) List
- c) Dictionary

d) none

Ans:- (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

Ans:- (d) Error

**5)** What keyword is used in Python to raise exceptions?

a) raise

b) try

c) goto

d) except

Ans:- (a) raise

**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

Ans:- (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

Ans:- (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

Ans:- (a) strptime

**9)** The python tuple is \_\_\_\_\_ in nature.

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

Ans:- (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

Ans:- A. range()

**Question 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

Ans:- C. Lambda function

**Question 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

Ans:- 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

Ans:- 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

Ans:- B. set() method

**15.** A text file contains only textual information consisting of \_\_\_\_.

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

Ans:- 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

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

```
    print(ship, captain)
```

**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 = {}`

Ans:- `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

Ans:- b) `captains["Enterprise"] = "Picard"`  
`captains["Voyager"] = "Janeway"`  
`captains["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

Ans:- 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()

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