Internship Project 1

1. def func(a, b):

        return b if a == 0 else func(b%a, a)

   print(func(30,75))

   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))

   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))

   d) Error *(as + operand is not supported by 'Len' function)*

5. What keyword is used in Python to raise exceptions?
   a) raise
   b) try
   c) goto
   d) except

   Ans → b) Try

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

   Ans → datetime

7. 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→ d) None, as datetime.combine( ) function is used.

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( )

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( )

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 // along with Pickle //

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 → 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

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

Ans → a) 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?

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 ?

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"?

Ans → c) del captains["Discovery"]