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))

Ans :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))

Ans : Filter

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

Ans: Tuple

4) set1 = {14, 3, 55}

set2 = {82, 49, 62}

set3={99,22,17}

print(len(set1 + set2 + set3))

Ans: Error

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

Ans:Raise

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

Ans: Datetime

7) What will be the output of the following code snippet?

Print(4**3 + (7 + 5)**(1 + 1))

Ans: 208

8) Which of the following functions converts date to corresponding time in Python?

Ans:Strftime

9) The python tuple is _____ in nature.

Ans: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.

Ans:range()

11)Amongst which of the following is a function which does not have any name?

Ans:Lambda function

12)The module Pickle is used to ___.

Ans: 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?

Ans: dump() method

14) Amongst which of the following is / are the method used to unpickling data from a binary file?

Ans: dump() mthod

15)A text file contains only textual information consisting of ___.

Ans: all of 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: both a & b

17) Which of the following lines of code will create an empty dictionary named captains?

Ans: 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: 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: 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: del captains["Discovery"]