ASSIGNMENT-1

1) 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) timedate
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-b) strftime

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) Lamba 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 & 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- d) 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- 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

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"]