**Assignment no.1**

**Batch no.-DS2309**

**Name: Divya Solanki**

1. def func(a,b):

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

print(func(30,75))

Ans: **15**

1. 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**

1. As what datatype are the \*args stored, when passed into

Ans. **Tuple**

1. set1 = {14, 3, 55}

set2 = {82, 49, 62}

set3={99,22,17}

print(len(set1 + set2 + set3))

Ans: **Error**

**TypeError** Traceback (most recent call last)

Cell **In[8], line 4**

2 set2 = {82, 49, 62}

3 set3={99,22,17}

**----> 4** print(len(set1 + set2 + set3))

**TypeError**: unsupported operand type(s) for +: 'set' and 'set'

1. What keyword is used in Python to raise exceptions?

Ans. **Raise**

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

Ans: **datetime**

1. print(4\*\*3 + (7 + 5)\*\*(1 + 1))

Ans: **208**

1. Which of the following functions converts date to corresponding time in Python?

Ans. **Strptime**

1. The python tuple is \_\_\_\_\_ in nature

Ans. **Immutable**

1. 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()**

1. Amongst which of the following is a function which does not have any name?

Ans. **Lambda function.**

1. The module Pickle is used to \_\_

Ans. **Serializing and De-serializing both**

1. Amongst which of the following is / are the method of convert Python objects for writing data in a binary file?

Ans. **Dump()**

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

**Ans. Load()**

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

Ans. **Alphabets ,Numbers, Special symbols they all comprises of textual information**

1. 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)**

1. Which of the following lines of code will create an empty dictionary named captains?

Ans. **Captain={}**

1. 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"**

1. 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}.")**

1. 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"]**