**PYTHON WORKSHEET – WORKSHEET 4**

1. Which of the following function is used to determine the length of a string in python?

Answer: B) len()

2. Python is?

Answer: B) interpreted

3. What will be the output of the following?

a = [1,2,3,2,1]

a.pop(2)

print(a)

Answer: B) [1,2,2,1]

4. If alist = [10,20,30,40,50,60], then alist[ : : -3] = ?

Answer: D) [60,30]

5. Which of the following will give the reverse of list ‘a’:

Answer: C) a[ : :-1]

6. If a = True, b = False and c = True. Then what will be the output of following code: if not a or b: print("Eena") elif not a or not b and c: print("Meena") elif not a or b or not b and a: print("Deeka") else: print("Domniqaa")

Answer: B) Meena

7. What is the output of the following? print([x+y for y in [“Hello ”, “Adios ”] for x in [“World ”, “Python ”]])

Answer: A) [“Hello World ”, “Hello Python ”, “Adios World ”, “Adios Python ”]

8. Str1 = “Hello Python”. What will be the output of : print(str1.find(‘o’))

Answer: A) 4

9. Which of the following is(are) correct method(s) to join two lists l1 and l2?

Answer: B) l1.append(l2)

10. s = “pyworld”. Select all of the following which give same results?

Answer: A) s[0]+s[-1] B) s[ : : -1][-1] + s[len(s)-1] D) s[ : : -1][ : : -6]

11. Differentiate between a compiler and an interpreter? Which of them is used in python language?

Answer: A compiler is a program that translates a source language or high-level programming language (for example, Java, C++) into a target machine code (binary bits – 1 and 0) that the CPU can process and understand. The program to be translated is written inside an editor and are known as source statements. The act of translating source code to machine or binary code is known as compilation. An interpreter is a program which also converts a high-level programming language (like Python, PHP, Perl) into machine code. Although similar to a compiler, the way that code is executed is different for both. Unlike a compiler that simply converts the source code to machine code, an interpreter can be run directly as an executable program. Python is generally referred to as an interpreted language. This means that each line of code is executed one by one. However, it does involve the process of compilation. The reason why Python is termed as an interpreted language is hat the compiler in Python does relatively less work than an interpreter or in a compiled language like C or Rust.

12. What is the purpose of PYTHONPATH environment variable?

Answer: PYTHONPATH is an environment variable which you can set to add additional directories where python will look for modules and packages. For most installations, you should not set these variables since they are not needed for Python to run. Python knows where to find its standard library. The only reason to set PYTHONPATH is to maintain directories of custom Python libraries that you do not want to install in the global default location.

13. How will you remove all the leading and trailing whitespaces in a string in python? Give one example.

Answer: To remove all trailing and leading whitespace in a string, we can use the method strip() in String class that gets rid of both these whitespaces

Input: ' Hello People '.strip()

Output: 'Hello People'

If we only want to remove leading or trailing whitespace use lstrip() or rstrip() respectively.

Input: ' Hello People'.lstrip()

Output: 'Hello People'

Input: 'Hello People '.rstrip()

Output: 'Hello People'

14. Write a python program to represent a user entered number in expanded form. For eg: user\_input = 12345 Output = 1\*10000 + 2\*1000 + 3\*100 + 4\*10 + 5\*1 15.

Answer in Jupyter notebook

15. Write a python program to determine whether the number entered by the user is an Armstrong number or not?

Answer in Jupyter notebook