# PYTHON WORKSHEET – WORKSHEET 4

## Q1 to Q8 have only one correct answer. Choose the correct option to answer your question.

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

C) strlen() C) stringlen()

Answer: ( A )

1. Python is?
   1. compiled B) interpreted

C) compiled then interpreted D) none of these

Answer: ( C )

1. What will be the output of the following? a = [1,2,3,2,1]

a.pop(2) print(a)

A) [1,3,2,1] B) [1,2,2,1]

C) [1,2,3,1] D) [1,3,1]

Answer: ( A )

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

A) [40,30,20,10] B) [30,20,10]

C) [60,30,10] D) [60,30]

Answer: ( C )

1. Which of the following will give the reverse of list ‘a’: A) a[-1:0] B) a[-1:-4]

C) a[ : :-1] D) a[0:-1:-1]

Answer: ( C )

1. 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")

* 1. Eeena B) Meena

C) Deeka D) Domniqaa

Answer: ( A )

1. What is the output of the following?

print([x+y for y in [“Hello ”, “Adios ”] for x in [“World ”, “Python ”]])

* 1. [“Hello World ”, “Hello Python ”, “Adios World ”, “Adios Python ”]
  2. [“Hello World ”, “Adios World ”, “Hello Python ”, “Adios Python ”]
  3. [“World Hello ”, “Python Hello ”, “World Adios ”, “Python Adios ”]
  4. [“World Hello ”, “World Adios ”, “Python Hello ”, “Python Adios ”]

Answer: ( C )

1. Str1 = “Hello Python”. What will be the output of : print(str1.find(‘o’)) A) 4 B) 4,10

C) 5,11 D) 5

Answer: ( A )

## Q9 and Q10 have multiple correct answers. Choose all the correct options to answer your question.

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

C) append(l1,l2) D) l1.extend(l2)

Answer: ( B ) ( C )

1. s = “pyworld”. Select all of the following which give same results? A) s[0]+s[-1] B) s[ : : -1][-1] + s[len(s)-1]

C) s[ : : -6] D) s[ : : -1][ : : -6]

Answer: ( A ) ( D)

## Q11 to Q13 are subjective questions, answer them briefly

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

Answer: **Interpreter** translates just one statement of the program at a time into machine code. **Compiler** scans the entire program and translates the whole of it into machine code at once. An **interpreter** takes very less time to analyze the source code. However, the overall time to execute the process is much slower.

1. What is the purpose of PYTHONPATH environment variable?

Answer: Background. Setting the PYTHONPATH **environment variable** is an easy way to make Python modules available for import from any directory. This **environment variable** can list one or more directory paths which contain your own modules. On Windows, multiple paths are separated by semicolons.

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

Answer: **strip**() **Python String strip**() function will **remove leading and trailing** whitespaces. If you want to **remove** only **leading** or **trailing spaces**, use lstrip() or rstrip() function instead.

## Q14 and Q15 are programming questions. Answer them in Jupyter Notebook.

1. 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

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

Program:

# take input from the user

num = int(input("Enter a number: "))

# initialize sum

sum = 0

# find the sum of the cube of each digit

temp = num

while temp > 0:

digit = temp % 10

sum += digit \*\* 3

temp //= 10

# display the result

if num == sum:

print(num,"is an Armstrong number")

else:

print(num,"is not an Armstrong number")