**Session1 - Python String Functions**

**Last live session assignment:**

b = "this is My First Python programming class and i am learNING python string and its function"

1 . Try to extract data from index one to index 300 with a jump of 3

Ans

b[:20:3]

o/p - 'tssyity'

2. Try to reverse a string without using reverse function

Ans

b[::-1]

o/p - 'noitcnuf sti dna gnirts nohtyp GNINrael ma i dna ssalc gnimmargorp nohtyP tsriF yM si siht'

3. Try to split a string after conversion of entire string in uppercase

Ans

b1 = b.upper()

b1.split(' ')

o/p - ['THIS',

'IS',

'MY',

'FIRST',

'PYTHON',

'PROGRAMMING',

'CLASS',

'AND',

'I',

'AM',

'LEARNING',

'PYTHON',

'STRING',

'AND',

'ITS',

'FUNCTION']

4. Try to convert the whole string into lower case

Ans

b.lower()

o/p - 'this is my first python programming class and i am learning python string and its function'

5 . Try to capitalize the whole string

Ans

b.capitalize()

o/p - 'This is my first python programming class and i am learning python string and its function'

6 . Write a diference between isalnum() and isalpha()

Ans

isalnum() will return Boolean true and false based on the string contains alphanumeric characters.

Isalpha() will return Boolean true/false based on the string contains only alphabetic characters.

7. Try to give an example of expand tab

Ans

‘Shift+Tab’ will give the description of each string functions which we define.

‘Tab’ will give the list of available inbuilt python functions. E.g if we declare string var, it will give list of string functions.

8 . Give an example of strip , lstrip and rstrip

Ans

‘Strip’ function will trim the white spaces from both sides of the string

‘Lstrip’ will trim the whitespaces from left side of the string

‘Rstrip’ will trim the whitespaces from right side of the string

9. Replace a string charecter by another charector by taking your own example

Ans

c='bhargavideepak'

c.replace('a','z')

o/p - 'bhzrgzvideepzk'

10 . Try to give a definition of string center function with and example

Ans

Center function will place the string in the center , left and right side of the string will be added with the characters which we pass as arguments.

c='bhargavideepak'

c.center(20,'-')

o/p - '---bhargavideepak---'

11 . Write your own definition of compiler and interpretor without copy paste form internet in your own language

Ans

Compiler – when the user writes the program and compile it, the machine will review the whole code and converts into machine level language for their understanding. It throws compilation error to the user if there is any syntax/logical error occurs while compiling the code. In python we don’t need this explicitly as it is done inbuilt.

Interpreter – It interpretes the code written and produces the output of the program.

12 . Python is a interpreted of compiled language give a clear ans with your understanding

Ans

Python is a interpreted language. It doesn’t do compilation as a explicit step. It interpretes and runs the code written into their understanding language and produces output without storing it as machine code.

13 . Try to write a usecase of python with your understanding .

Ans

Pythons are used in following areas

Data Science/Data Analytics

Machine Learning

Deep learning

AI development

Software development

Web application development

**Assignment1 :**

1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\* expressions

'hello' values

-87.8 values

- expressions

/ expressions

* expressions

6 values

Ans

\* = expressions

'hello' = values

-87.8 = values

- = expressions

/ expressions

* expressions

6 values

2. What is the difference between string and variable?

Ans String is a datatype which defines string characters , variable is the declaration given to the values.

3. Describe three different data types.

Ans

Int – to represent integer numbers

String – to represent strings

Float – to represent floating point

4. What is an expression made up of? What do all expressions do?

Ans Expression contains mathematical functions.

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

Ans

Expression contains mathematical functions.

Statements contains declarations.

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

Ans 23

7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

Ans spamspamspam

8. Why is eggs a valid variable name while 100 is invalid?

Ans Variable cannot be declared in digit format. It should be in alphabetical.

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

Ans int for integer , float for floating point , string for string version

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

Ans 99 is a integer which cannot be concatenated with string