

Assignment 1

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	*, -, /, +
Values	'hello', -87.8, 6.

2. What is the difference between string and variable?

The string is set of characters, which doesn't store any kind of values. The variables are once, which stores the integer, floating values or any character or string.

3. Describe three different data types.

Integer data type	In this datatype only integer values are assigned to the variables
Floating data type	The variables can contain rational numbers which are in the form of p/q
Char datatype	Char is datatype where we can assign the characters or strings to the variables

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

Expressions are made up of arithmetic or logical operations, which can be performed on the variables or directly on the data. The expressions are used to perform some tasks.

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

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

```
bacon = 22
```

```
bacon + 1
```

Ans. `bacon = 22`

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

'spam' + 'spamspam' spamspamspam

'spam' * 3 spamspamspam

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

The numbers are not valid as a variable because it is a constant value. The combination of numbers and alphabets is valid. The combination of special character _ and alphabets is also valid. e.g. Eggs_100, eggs100 etc.

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

Int(input())

Float(input())

Input()

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

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

```
TypeError                                Traceback (most recent call
last)
<ipython-input-3-d24137131a5c> in <module>
----> 1 'I have eaten ' + 99 + ' burritos.'
```

Corrected one: 'I have eaten ' + '99' + ' burritos.'