

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.

* = expression

'hello' = values

-87.8 = expression

- = expression

/ = expression

+ = expression

6 = values

2. What is the difference between string and variable?

Ans.= variables are named , location used to store data in memory

String is a collection of characters

3. Describe three different data types.

Ans. 1.integers = integers are the whole numbers without a fractional components they can be positive or negative

2.floats = floats are represent real numbers and are written in a decimal point

3. list = list is an orderd collection , sequence of items. Lists are similar to arrays in oyher language but with additional functionality. In lis we used the [] bracket only.

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

Ans. Expression is a combination of values, variables, mathematical operators, and calls to functions. Expressions need to be evaluated.

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

Ans. expressions are used to evaluate values, while statements are used to control the flow of execution.

```
spam = 10 #expression
```

```
print(spam) #statement
```

```
output = 10
```

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

```
bacon = 22
```

```
bacon + 1
```

ans. 22

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. The name of a variable in Python must start with a letter or the underscore character (_). It can also contain any combination of letters, numbers, and underscores, but the first character cannot be a number.

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

Ans. int()

float()

str()

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

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

Ans. Because 99 is not string,

we can fix by writing in this form

```
'I have eaten ' + string(99) + ' burritos.'
```