

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.

\*

'hello'

-87.8

-

/

+

6

Ans:

Value	Expression
'hello'	*
-87.8	-
6	/
	+

2. What is the difference between string and variable?

Ans: String is a data that is stored in a variable with enclosed “ “, whereas variable is the identifier of the location where data is stored, that can be accessed and manipulated through variable.

3. Describe three different data types.

Ans: int type for integers, float type for decimals and string type for storing a long expression that can consists of numbers, operators, special characters and alphabets enclosed within “ “.

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

Ans: Expression is made of numbers, variables, mathematical operators and method invocation to evaluate value of unknown variables.

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

Ans: An expression is a mathematical function to evaluate value of a variable, whereas a statement is like a command that a python interpreter executes like print.

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

```
bacon=22
```

```
bacon+1
```

Ans: bacon variable consists the value 23.

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

```
'spam'+'spamspam'
```

```
'spam'*3
```

Ans: 'spam'+'spamspam' will give 'spamspamspam' since this will concatenate the two strings.

'spam'\*3 will concatenate the string three times and its value will be 'spamspamspam'.

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

Ans: In python variable name cannot start with number or special character (except \_) it should always start with alphabet.

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

Ans: for integer version of a value: int()

for floating-point number version of a value: float()

for string version of a value: str()

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

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

Ans: The concatenation can only happen between string to string or string to char.