### Vaibhay Joshi

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' - value
-87.8 - value
- -> expression
/ -> expression
+ -> expression
6 value
```

### 2. What is the difference between string and variable?

Ans: Variables are the names to represent memory locations where we store our data during execution of our program. Variable is some value which can contain string as well. String is a data type, generally used for storing text values.

#### 3. Describe three different data types.

Ans: There are various data types available in Python.

(i) int(): All real numbers which do not contain decimal values are integers. The data type is int().

- (ii) float: All real numbers containing decimal values are known as float in Python.
- (iii) bool(): returns Output as True or False only, depends on expression.

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

Ans: Expression is made up of operands and operators. All expression always produce or return some value.

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

**Ans:** All expressions in Python produce or return some value while a statement may or may not produce or displays a result value.

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

bacon = 22

bacon + 1

**Ans:** The variable bacon contains 22 only, because value of variable bacon is not changed.

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

'spam' + 'spamspam'

'spam' \* 3

Ans: The values of the following term is: 'spamspamspam'

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

Ans: eggs is a valid variable name while 100 is invalid because variable name 100 is containing only digit. A variable name must be a combination of string, number and underscore.

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

Ans: The 3 functions are:

int() to get the integer number.

float() to get floating point number

str() to get string version of a value

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

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

Ans: The expression is causing error because string can be concatenated with string only, not any integer value.

To fix this error, we can consider 99 also as string value.

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