

# 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.

- asterisk `*` is an expression
- `'hello'` is value
- `-87.8` is value
- `-` is an expression
- `/` is an expression
- `+` is an expression
- `6` is an value

2. what is difference between string and variable?

string is value in between single and double quotes and a variable is name of location where we can store the value with the help of assignment operator `=`.

3. Describe three different data types.

**string** :- it is collection of one or more characters put in between single and double quote.

**boolean** :- it is used to store two value True and False. it used to check wether the expression is true or false

**numeric** :- it represent data which having numeric value. for example integer value, floating point value etc.

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

expression is made up of variable, operator, values and calling function and all the expression are evaluated and then we define statement to display the result or output.

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

expression are used to combining variable and values and evaluate them and the statement is complete line which perform some action.

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

```
bacon = 22
```

```
bacon + 1
```

the value of `bacon` become 23

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?

as per the variable name convention variable name don't start with digits and the variable name eggs make sense that's why eggs is valid variable name while 100 is invalid.

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

`int()` used to get integer. `float()` is used to floating point number and for string version we use `str()`.

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

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

because of 99. 99 is an integer value and other both are string and it concatenates only string not an integer. to solve problem convert 99 to string using `str()` function.

```
In [5]: 'i have eaten' + str(99) + 'burritos.'
```

```
Out[5]: 'i have eaten99burritos.'
```

```
In [ ]:
```