

Assignment-1:

1. What are the differences between operators and values in the following?

* :- this is an **operator** which is used for multiplication.

'Hello' :- this is **value** which is string.

-87.8 :- this is floating number **value**.

- :- this is subtract **operator**.

/ :- this is division **operator**.

+ :- this is plus **operator**.

6 :- this is integer **value**.

2. What is the difference between string and variable?

Spam : this is **variable** spam which can store any type of value.

'spam' : this is **string** which is list of characters. Any values in the single or double quotation is string value.

3. Describe three different data forms.

Integer : 10,2,22 etc..

Floting point numbers : 10.2, 22.2525 etc..

Boolean : True , False

4. What makes up an expression? What are the functions of all expressions?

An expression is a combination of values, variables and operators.

For example : $10 + 2$, $a-b$

An expression need to be evaluate and it will produce some values.

5. In this chapter, assignment statements such as `spam = 10` were added. What's the difference between a declaration and an expression?

Here,

In the **Declaration**, we are just creating new variable without giving any values.

This `spam = 10` statement, we can refer it as **an expression** as we are giving value 10 to variable spam.

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

```
bacon = 22
```

```
bacon + 1
```

after running this code, value of bacon will be **22** because we are **not assigning** it to bacon again after increment.

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

```
'spam' + 'spamspam' :- output = 'spamspamspam'
```

```
'spam' * 3 :- output = 'spamspamspam'
```

8. Why is it that eggs is a true variable name but 100 is not?

Variable name can be start with anything **except reserve keyword, reserve characters and Numbers.**

Egg is start with 'e' alphabet which is fine.

whereas 100 is start with 1 which is number or digits which **is not obeying rule for** variable name.

9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?

For converting into interger : function **int()**

For converting into floating-point value: function **float()**

For converting into string: function **string()**

10. What is the error caused by this expression? What would you do about it?

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

This expression will throw `TypeError` .

To solve this we can convert 99 into string like `'99'` .

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