**Assignment\_1**

Q1. 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.

Ans:

\* is Expression

'hello' is Value

-87.8 is Value

- is Expression

/ is Expression

+ is Expression

6 is Value

Q2. What is the difference between string and variable?

**Ans:**

A Variable is a store of information, and a String is a type of information you would store in a Variable. A String is usually words, enclosed with " "

Eg String x ="Welcome in Mumbai"

Here, x is the Variable, and we declared it as a String, use the single = to assign the text to it.

Q3. Describe three different data types.

**Ans:**

1. String

str: eg. a = “I am girl” ,b=”Sneha”

1. Integer

int : eg. a = 12, b = 90

1. list

eg. l = [], l = [1,2,3,4]

1. Boolean

Bool : eg. a=True , b=False

Q4. What is an expression made up of? What do all expressions do?

**Ans:**

* An expression is a combination of values, variables, operators, and calls to functions. Expressions need to be evaluated.
* Expressions are representations of value. They are different from statement in the fact that statements do something while expressions are representation of value. For example any string is also an expressions since it represents the value of the string as well.

Q5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

**Ans:**

An expression evaluates to a single value. A statement does not.

Q6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

**Ans:**

The Value of the becon remain same (20) because we did not assigne updated value to becon variable i.e we never perform becon = becon + 1

So, value remain same ie. becon = 20

Q7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

**Ans:**

‘span’ + ‘spamsam’ = > spamspamspam

‘spam’\*3 => spamspamspam

Q8. Why is eggs a valid variable name while 100 is invalid?

**Ans:**

According to rule variable name cannot be start with any number that’s why 100 is invalid.

Q9. What three functions can be used to get the integer, floating-point number, or string version of a value?

**Ans:**

int() for integer

float() for floating number

str() for string

Q10. Why does this expression cause an error? How can you fix it?

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

**Ans:**

It cause error because only string can concatenate with other string and 99 is integer.

Solution is: ‘I have eaten 99 burritos’ or ‘I have eaten’ + str(99) + ‘burriots’