**Assignment 1 Solutions**

**Ans 1**

\* expressions

‘hello’ value

-87.8 value

- expression

/ Expression

6 value

**Ans 2**

A variable can store everything from strings to numbers and its value can be changed that’s why it is called a variable .

For e.g.



X=10



X =”hello”

A string is the values inside the quotes assigned to a string.



For e.g.



X = “hello”



**Ans 3.**

Float : X = 10.5 is a float variable that will print the value after the point (used to store floating point number / decimal numbers ).

Int : X= 10 is a int variable that it will not print the floating point value (decimal values) it prints the whole integral value.

Complex : Complex number specified as (real part) + (imaginary part).

Eg (14+21.5)

We can check the variable type by using type () function.

Eg :

print(type(X)).

**Ans 4.**

Expression is a combination of operator + operands

Operator (+,-,\*,%)

Operands ( a , b , c )

Eg of expression : x = a+b\*c

**Ans 5 :**

 An expression is a combination operator + operands .

Operator (+,-,\*,%)

Operands ( a , b , c )

When we type an expression the interpreter will find the value of the expression.

eg: 1\*2+2-1

A statement is a unit of code used for creating a variable or displaying a value .

eg: variable declaration and assignment are statements because they do not return a value

eg : 1\*2+2-1 # Is a Expression

Name = 'Vinayak' # Is a Statement

print("Hello!") # Is a Expression Statement

**Ans6:**

The value of bacon is set to 22 .

The expression bacon + 1 does not reassign the value in bacon . The value remains the same

bacon=22

bacon+1

print(bacon)

Output = 22

**Ans7:**

Both expressions evaluate to the string 'spamspamspam' .

The first expression will perform String Concatenation and the second expression will perform String Multiplication

Output : spamspamspam

**Ans 8:**

Python Variable names cannot begin with a number. The python rules for naming a variable are :-

1. Variable name must start with a letter or the underscore character.
2. Variable name cannot start with a number.
3. Variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, & \_ ).
4. Variable names are case-sensitive (name, Name are different variables).
5. The reserved words(keywords) cannot be used naming the variable.

**Ans9:**

 The int(),float(),and str() functions will evaluate to the integer, floating-point number, string version of the value passed to them.

**Ans10:**

This error is that 99 is not a string.

99 must be typecasted to a string to fix this error.

**Fix :**  
Input: 'I have eaten ' + str(99) + 'burritos.'  
Output: 'I have eaten 99 burritos.'