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.

\* - this is astric expression used for multiplication.

'hello'- this is string.

-87.8- this is float because number is in decimal.

- this is expression used for difference.

/ -this is forward slash used for division.

* -this is plus expression used for addition or concatenation

6 –this is integer.

2. What is the difference between string and variable?

Variable- variable are as a container it is used to store data type in it, or data structure.

Strings- strings are one of the data type which is been stored in the Variable.

3. Describe three different data types.

1-interger (int)

2-string (str)

3-flaot- (float)

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

Expressions are made up of logical operators, bitwise operators, arithmetic operators.

Expression gives the desired value by performing the task inside the memory by using sets of functions and operators.

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

Statement:- statement is when we store any data to variable or statement is like when we just tell about the python that x=10, so this is an assignment statement, or in general when we do not perform any operation.

Expression is when python give the desired value by performing the task in the memory by using sets of function and operations.

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

bacon = 22

bacon + 1

bacon+1 will give 23, but the variable bacon will contain 22 only as we do not have done any changed to the variable, if we print (bacon) then it will give 22, and if we say print(bacon+1) is will give 23, but again if you print(bacon), it will give 22.

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

'spam' + 'spamspam'=this will concatenate this both string=spamspamspam

'spam' \* 3=this will multiply spam by 3 so it will give=spamspamspam

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

Because to create the variable there is few criteria like,

1-variable should not start from the no,

2-variable cannot have any special character or space between it.

3-variable should always start with alphabet or underscore (\_)

So eggs meet the criteria but 100 won’t. because name should always start with alphabet, it can be eggs100 but not 100 only.

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

String=str

Float=float

Integer= int

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

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

We cannot concatenate string with integer here 99 is integer so we can convert 99 in integer by

‘I have eaten’+str(99)+’burritos ‘

Or ‘ I have eaten’ +’99’+’burritos’

Above both the expression are same. We can convert integer into string by using str function, or we can simply use it into the single or double colon. (‘ ‘) or (“ “)