**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.

**ANSWER:**

\* = multiplication operator

'Hello' = String

-87.8 = Float

- = subtraction operator

/ = division operator

* = Addition operator

6 = integer

**2**. What is the difference between string and variable?

**ANSWER:**

String are collection of character in double cots or single cots

EG: ‘syed’

Variables are names which contain some data type values like Integer, string,float,list etc..

EG: a=10, b=’name’, c=’20.5’

**3**. Describe three different data types.

**ANSWER:**

integer : 12

String :’’name’’

Float :20.6

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

**ANSWER:**

“expression” is a combination of values and functions that are combined and interpreted by the compiler to create a new value

Expression made up of some arithmetic operator which can perform addition, subtraction,multiplication,division

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

**ANSWER:**

expression is a combination of values and functions that are combined

EG: a=10+5\*2 it make some calculation and assign the value to ‘’a’’

Statement is just a value is assigned to a variable Name like

EG: spam = 10 is just 10 assigned to the ‘spam’ variable

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

bacon = 22

bacon + 1

**ANSWER:**

First 22 is assigned to ‘’bacon ’’ and then bacon is added with 1

So variable bacon contain=**23**

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

'spam' + 'spamspam'

'spam' \* 3

**ANSWER:**

1. 'Spamspamspam'
2. ‘spamspamspam’

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

**ANSWER:**

Egg a valid variable name because we have to use string or some special character like \_ to create a variable name.

While 100 is an integer so we can not use as a variable

So we can use “egg100" it is valid variable.

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

**ANSWER:**

1.int()

2.float()

3.str()

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

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

**ANSWER:**

Because we can only join the **same data type** value using + operator . it can be fixed

By changing the code slightly **'I have eaten ' + ‘99' + ' burritos.'**