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.

\* ---------------- **(It is Expression.)**

'Hello' -----------🡪 (**It is value.)**

-87.8-------------- **🡪(It is Value.)**

- ------------------ **🡪(It is Expression.)**

/ ---------------- **🡪(It is Expression.)**

* ----------- **🡪(It is Expression.)**

6 ------------------ 🡪(**It is Value.)**

2. What is the difference between string and variable?

🡪 **A String is value representing text e.g. “Hey”. Whereas Variable is something that stores the data. Variable could be the any name that that can be refer to any value. E.g. int (), float ().**

3. Describe three different data types.

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1. **INTEGER [int()] = it is a data type that stores the numeric data. E.g.70 ,100,10**
2. **FLOATING POINT [float ()] = It is a datatype that stores the decimal point values. E.g. 10.2, 23.5**
3. **BOOLEAN [bool ()] = It is a datatype that represent the value as true or false.**
4. **CHARACTER [char ()] = It is used to store letters, digits, various symbols or even a blank space too.**

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

🡪**An Expression is made up of values, operators, variables, and various methods constructed according to various relatable syntax. Expressions represents values and it helps to execute the program.**

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

🡪 **An Expression is made up of values, operators, variables, and various methods constructed according to various relatable syntax. Statement is instruction that state somethings.**

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

bacon = 22

bacon + 1

**--🡪 23.**

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

'spam' + 'spamspam' ------🡪 **1020**

'spam' \* 3 -----**🡪30**

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

**-🡪 100 is invalid because it represent value of integer. We cans tore 100 into eggs but we cannot store eggs into 100. 100 is itself integer and it cannot be any variable.**

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

-🡪

* **For integer we have to use int()**
* **For floating point number we have to use float().**
* **And for string we have to sue str().**

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

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

**-🡪 ‘I have eaten ’ is string as well as ‘burritos’ is also string but 99 is integer so we cannot concatenate them. So we have to typecast it as follows:-**

**'I have eaten ' + str(99) + ' burritos.'**

**Now this will print as : 'I have eaten 99 burritos.'**