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.

\*

'hello'

-87.8

-

/

6

Ans - values are -- "hello" , -87.8 , 6

expression -- \* ,- , /, .

2. What is the difference between string and variable?

Ans - A string is a sequence of characters, while a variable is a placeholder that can store different types of data, including strings.

3. Describe three different data types.

Ans - Int , Float , string ,list

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

Ans- Expressions in programming are composed of operands and operators. They perform calculations, assignments, evaluations, and can be passed as arguments to functions.

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

Ans - Expressions are evaluated to produce a value, while statements are executable units of code that perform actions or control the flow of a program.

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

bacon = 22

bacon + 1

Ans = 22

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

'spam' + 'spamspam'

'spam' \* 3

Ans - both terms yield the same value 'spamspamspam'

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

Ans- eggs meets the criteria for a valid variable name, 100 does not because it starts with a digit

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

Ans - To integer: int()

To floating-point: float()

To string: str()

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

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

Ans - This expression causes an error because we're trying to concatenate a string ('I have eaten ') with an integer (99) directly, which isn't allowed in Python.

we're converting the integer 99 to a string before concatenating it, which will result in 'I have eaten 99 burritos.', without causing an error.