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

|  |  |
| --- | --- |
| VALUES | EXPRESSION |
| ‘hello’ | \* |
| -87.8 | - |
| 6 | / |
|  | + |

2. What is the difference between string and variable?

|  |  |
| --- | --- |
| String | Variable |
| A collection of characters which surrounded in single or double quotes is known as String  EX:  ‘Hello World’  ‘123’ | A memorybox where we can store and retrieve the value is known as variable.  The rules to create a variable is  Starts with alpha and include numbers and special characters.  EX: a, num1, |

3. Describe three different data types.

|  |  |  |
| --- | --- | --- |
| Int: Used to store numeric values | String: A collection of characters | Bool: Return True or False |

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

Expression consist of variable and mathematical operators which yield value after the calculation.

Ex: a= 5,b=10

c=a+b // expression

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

|  |  |
| --- | --- |
| EXPRESSION | STATEMENT |
| A set of variable or number which combine with arithmetic operator is known as expression. | In a program all the coding are statement.  A expression is also a statement but all the statement are not expression.  Ex: a=10  Print(‘Hello’)  a=5+10 |

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

bacon = 22

bacon + 1

bacon contain 22.

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

|  |  |
| --- | --- |
| INPUT | OUTPUT |
| 'spam' + 'spamspam' | spamspamspam |
| 'spam' \* 3 | Spamspamspam |

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

A variable must starts with alpha or underscore and numbers are allowed after the first letter.

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

Int(), float(), str()functions can be used to get the integer, floating-point number, or string version of a value.

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

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

We can only concatenate str (not "int") to str

Recoding:-

‘I have eaten’,99,’burritos.’