1. **What are the differences between operators and values in the following?**

   Operator: Operators are special symbols in Python that carry out arithmetic
   or **logical** computation and specific operations in python.

   Value: Value is fundamentals things or character in python. We assign any number
   or letter to any variable that number / letter are called value

*	*Operator*
'hello'	*Value*
-87.8	*Value*
-	*Operator*
/	*Operator*
+	*Operator*
6	*Value*

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

   String: String is a data type in programming language. It is used to represent the
   texts, letters instead of number units. We uses inverted commas (" "), upper
   commas (' ') to represent the string data type.

   Variable: Variable is a symbol or letter that represent the value. In programming,
   we assign any value to a variable

spam	Variable
'spam'	String value

3. **Describe three different data forms.**

   *Data Form*s is considered as *Data Type* in programming language. Date type is a data
   storage format that contain a specific type or range of values. Data type is the
   classification of data items. Some data type are Integer, String, Boolean, Float
   etc.
   type () - function is used to find the type of data type.

   Integer: It is represented by **"Int".** It contains all negative number, positive numbers
   including zero.

   Float: Float data type is used to store floating-point numbers like 1.9, 9.902, 2.0,
   15.2, etc. It is specified by a decimal point. It is represented by **"Float".**

   String: Strings are sequences of characters, represented by either single or double
   quotes or triple quotes. This is an immutable data type. It is demoted by "**Str**"
   Exp. X= "Delhi"

4. What makes up an expression? What are the functions of all expressions?

An **expression** is a representation of values, variables, operators, operands. It's an instruction that combines values and operators and always evaluates down to a single value.

Functions and its application is tabled is as below

Operators in an expression	Operations
(+)	It perform Addition operation
(-)	It perform Subtraction operation
(/)	It perform Division operation
(*)	It perform Multiplication operation
(%)	It provide the reminder value after division
(//)	It perform integer division. It always gives a floor value of remainder (if remainder is in decimal value)
(= =)	It perform the equalize operation such as x = 10 & y= 10 then **x = = y**
(**)	**a******b**, a raised to the power of b

5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression?

Declaration of a variable means binding it to a data type. **Declaration** of variables is not required in Python **while expression is** an instruction that combines values and operators and always evaluates down to a single value.

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

bacon = 22

bacon + 1

O/p is 23

Bacon contains 22 .

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

'spam' + 'spamspam'

O/p is   **'spamspamspam'**

'spam' * 3

O/p is   **'spamspamspam'**

8. Why is it that eggs is a true variable name but 100 is not?

As per naming convention in python, variable name must start with a letter or the underscore character. **A variable name cannot start with a number**. It can contain alphanumeric words, underscore.
That's the reason **eggs is a true variable name but 100 is not**

9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?

" **int** " function is used to convert a value to an integer.

10. What is the error caused by this expression? What would you do about it?

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

Type of error :: can only concatenate str (not "int") to str

String type of data can not be added with integer type of data

Solution : we will convert 99 (integer value) into string using   single quotes ('99')

Correct code is

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