In [ ]:

```
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


A) Values are ‘hello’,-87.8,6.
   Expressions are *, -  , / , + .
```

In [ ]:

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

•   Variables are symbols that you can use to store data in a program.
You can think of them as an empty box that you fill with some data (or) value.
•   Strings are data, so we can use them to fill up a Variable.
Declaring strings as variables can make it easier for us to work with
strings throughout our python programs.

Eg: String X = “Tom”;
// Here X is variable and type of value it stores is in string.
```

In [ ]:

```
3. Describe three different data types.


1.  Strings: Strings are the text that is anything between "" double quotes.
 Strings are the data.Strings are immutable.

eg: "Hello !","23.34"
2. Integers : Integers are whole numbers, They are immutable.
    eg:5324
3. Floats : Floats are decimal numbers, They are immutable in nature.
    eg:4.1215
```

In [ ]:

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

A) An Expression is a combination of values, variables,operators and
calls to functions.Expressions need to be evaluated.If you ask python
to print an expression, the interpreter evaluates the expression and displays the result.

    What do all expressions do?
    Expressions are representation of value. They are different from
    statement in the fact that statements do something while expressions
    are representation of value for example any string is also an expressions
    since it represents the value of the string as well.
```

In [ ]:

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


A)An Expression evaluates to a single value. A statement does not.
```

In [ ]:

```
6. After running the following code, what does the variable bacon contain?
bacon = 22
bacon + 1

A)The bacon variable is set to 22. The becon +1 does not reassign the value
in bacon (that would need an assignment statement : bacon = bacon+1)
```

In [ ]:

```
7. What should the values of the following two terms be?
'spam' + 'spamspam'
'spam' * 3

A) Both expressions evaluate the string 'spamspamspam'.
```

In [ ]:

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

A)Variable names cannot begin with a number.
```

In [ ]:

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


A)The int(),float(),and str() functions will evaluate to the integer,
floating - point number and string versions of the value passed to them.
```

In [ ]:

```
10. Why does this expression cause an error? How can you fix it?
'I have eaten ' + 99 + ' burritos.'

A)The Expression causes an error because 99 is an integer, and
only strings can be concatenated to other strings with the + operator.
The correct way is 'I have eaten'+str (99) + 'burritos.'
```