

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

*

'hello'

-87.8

-

/

+

6

ANS- Here values 'hello' ,-87.8 are the data that is passed to the program And Operators *, - , +, /, perform operations on this data.

2. What is the difference between string and variable?

spam

'spam'

ANS- A string is a literal, it is a value in itself . It is immutable in nature.

A variable on the other hand is a alias name given to a literal by which it is identified by the user or the system through that name. And it is mutable in nature.

3. Describe three different data forms.

ANS- 1.Integer

2.String

3.Boolean

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

ANS- Expressions are a meaningful combination of operator and values , which produces output.

The function of expressions are to get desirable output by processing the data .

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

Ans-A declaration defines a identifier its value and data type in the program.

A Expression is a meaningful combination of operator and values , which performs an operation.

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

```
bacon = 22
```

```
bacon + 1
```

ANS- `bacon` contains 22

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

```
'spam' + 'spamspam'
```

```
'spam' * 3
```

ANS- 1) `'spamspamspam'`

2) `'spamspamspam'`

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

ANS- A variable name cannot start with a number, It can only start with a letter or underscore.

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

ANS- The Functions are- 1. `int()`

2. `float()`

3. `str()`

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

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

ANS- We cannot directly add a integer to a string. We first need to convert the integer to a string . Correct code -

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