ASSIGNMENT -1

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Ans 1. 15//2 = 7

Because '//' operator performs the floor division. It returns the integer quotient after division.

Ans 2. '==' operator is used for checking whether the two values are equal or not. It returns True or False.

'!=' is the 'not equal' operator. It checks if two values are not equal.

Ans 3. name = 'Ayush Gupta'

Ans 4. The len(name) return the length of string stored in variable name. Fore above case the output of len(name) will be 11 (including blank space)

Ans 5. The in operator is used in python to check if a given value is present in a series or sequence of values like string, list, tuple etc.

Ans 6. fruits = ['Apple', 'Banana', 'Orange']

Ans 7. A list follows zero based indexing from Left-to-right and the index starts from -1 from Right-to-left. For 'Banana' in above list 'fruits', the index from Left-to-right is '1' and from Right -to-left is '-2'.

Ans 8. To add a value at the end of a list, we use an in-built list function called as append(). The code to add 'grape' at the end of list 'fruits' is:

```
fruits.append('grapes')
```

Ans 9. unique_numbers = {1,2,3,4,5}

Ans 10. List and sets are data types. In python. Difference between list and set are:

- List is denoted by '[ ]' and set is denoted by '{ }'.
- A list can store duplicate values but a set cannot store duplicate values.
- Data is stored in order in a list but there is no order in sets.
- Lists support Indexing and Slicing but there is no indexing and slicing in sets.

Ans 11.
```
sentence = 'I am completing my python assignment.'
```

Ans 12.
```
if 'Apple' in fruits:
        print('Apple is present in list')
else:
        print('Apple is not present in list')
```

Ans 13.
```
string = '5'
integer = int(string)
```

Ans 14. The 'not' operator in python is an unary operator that is used for negation of Boolean values. It turns 'True' to 'False' and 'False' to 'True'.

Ans 15.
```
numbers = [1,2,3,4,5]
```

Ans 16. We can remove a value from the list by using the in-built list method called pop(). We need to pass the index of the value we want to remove. To remove '3', we need to pass its index that is '2'.

```
numbers.pop(2)
```

Ans 17.
```
letters = {'a', 'b', 'c'}
```

Ans 18. To add the letter 'd' to the set, we use the in-built set method called add().

```
letters.add('d')
```

Ans 19. The '%' operator is called as the modulus operator in python. It returns the remainder value after the division of 2 numbers.

Ans20. To check if the length of the fruits list is greater than 3, we us len() function and compare the value returned by it.

```
if len(fruits) > 3:
        print('Length of fruit list is greater than 3')
else:
        print('Length of fruit list is not greater than 3')
```