

structures of data-Booleans

jerrysolomons

2/8/2021

BOOLEANS

Booleans are binary variables that have one of the two possible values, 0 or 1 and true or false

Mostly occur in the comparison of two values giving a boolean answer

Example

```
print (20>15)
```

```
print (40<30).
```

#== is a comparison operator that gives a false, true or an error #bool() allows one to evaluate a value returning a 'true' or 'false' answer

Example

Running a condition in an if statement the answer is a true or false

when evaluating a string or a number

```
x = 'hallo' y = 15
```

```
print (bool(x)) print(bool(y))
```

any string is true, except empty strings

#any number is true except 0 #any list, tuple and dictionary are true, except empty ones

#Example `bool(['a','b','c'])` `bool([1,2,3])` `bool(0)` `bool(['oranges','bananas','apple'])`

Not many values evaluate to false except (), {}, [], "", 0, and the value none

```
#example bool({})
```

NB: the isinstance() is used in python to ascertain a particular type of data

```
x= 400.35
```

```
print=(isinstance(x,int))
```

END