1.What are the two values of the Boolean data type? How do you write them?

Answer: true, false are the two values. In Python should use True, False

Example: a, b = True, False

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2. What are the three different types of Boolean operators?

Answer:

AND: return True when (expression1 and (expression2) satisfies.

Example: (2<3) and (5>2) # True

OR: return True when (expression1 or (expression2) satisfies.

Example: (2<3) and (1>2) # True

NOT: return True when (expression) returns False and vice versa.

Example 1: not (2<3) # False

Example 2: not (1>2) # True

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3. Make a list of each Boolean operator's truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluate).

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4. What are the values of the following expressions?

(5 > 4) and (3 == 5) **# False**

not (5 > 4) **# False**

(5 > 4) or (3 == 5) **# True**

not ((5 > 4) or (3 == 5)) **# False**

(True and True) and (True == False) **# False**

(not False) or (not True) **# True**

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5. What are the six comparison operators?

Answer: >, <, <=, >=, !=, ==

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6. How do you tell the difference between the equal to and assignment operators? Describe a condition and when you would use one.

Answer:

Assignment operators are use to assign the value to the variable. This assignment operator can be use to alter the value of the variable.

Example 1: a,b = 10,20 **# assigning values to variable a and b**

Example 2: a = 1 **# alter the value of variable 'a'**

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7. Identify the three blocks in this code:

```
spam = 0

if spam == 10:

        print('eggs')      # block 1

if spam > 5:

        print('bacon')    # block 2

else:

        print('ham')      # block 3

        print('spam')    # block 3

        print('spam')    # block 3
```

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8. Write code that prints Hello if 1 is stored in spam, prints Howdy if 2 is stored in spam, and prints Greetings! if anything else is stored in spam.

```
Spam  = 0
x = int(input("Enter the value : "))
if x == 1:
        print('Hello')
elif x == 0:
        print('Howdy')
```

else:

       print('Greetings!')

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9.If your programme is stuck in an endless loop, what keys you'll press?

Answer: Ctr+C

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10. How can you tell the difference between break and continue?

Answer:

       break : The 'break 'stop the continuation of the loop.

       continue : The 'continue' does not stop the continuation of loop and it stops the current.

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11. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

Answer:

       range(10) in this function initial value is 0 by default and incrementing value is 1

       range(0,10) in this function initial value is 0 by default and incrementing value is 1 (we can pass any number as parameter 1)

       range(0,10,1) in this function initial value is 0 by default and incrementing value is 1 (we can pass any number as parameter 1 and incrementing value in parameter 2)

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12. Write a short program that prints the numbers 1 to 10 using a for loop. Then write an equivalent program that prints the numbers 1 to 10 using a while loop.

For Loop:

```
for i in range(1,11):
        print(i)
```

While Loop:

```
i = 1
while(i <= 10):
        print(i)
        i = i + 1
```

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13. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

Answer:

Import spam as s

s.bacon()