

Answers

1.

Boolean function has True and False. We denote them as T and F and rest of the letters are written in smaller case.

2.

The Boolean operator are And, Or and Not.

3.

True and True is True.

True and False is False.

False and True is False.

False and False is False.

True or True is True.

True or False is True.

False or True is True.

False or False is False.

not True is False.

not False is True.

4.

$(5 > 4) \text{ and } (3 == 5) = \text{False}$

$\text{not } (5 > 4) = \text{False}$

$(5 > 4) \text{ or } (3 == 5) = \text{True}$

$\text{not } ((5 > 4) \text{ or } (3 == 5)) = \text{False}$

$(\text{True and True}) \text{ and } (\text{True} == \text{False}) = \text{False}$

$(\text{not False}) \text{ or } (\text{not True}) = \text{True}$

5.

Python has six comparison operators

1. less than (<)

- 2. less than or equal to (<=)
- 3. greater than (>)
- 4. greater than or equal to (>=)
- 5. equal to (==)
- 6. not equal to (!=)

6.

= is a equal to operator

== is a assignment operator

We use = to assign the value and the == is use for the comparison of two variables or constants.

7.

The three blocks are everything inside the if statement and the lines print('bacon') and print('ham').

```
print('eggs')
if spam > 5:
    print('bacon')
else:
    print('ham')
print('spam')
```

8.

```
if spam == 1:
    print('Hello')
elif spam == 2:
    print('Howdy')
else:
    print('Greetings!')
```

9.

Press CTRL-C to stop a program stuck in an infinite loop.

10.

The break statement will move the execution outside and just after a loop. The continue statement will move the execution to the start of the loop.

11.

They all do the same thing. The range(10) call ranges from 0 up to (but not including) 10, range(0, 10) explicitly tells the loop to start at 0, and range(0, 10, 1) explicitly tells the loop to increase the variable by 1 on each iteration.

12.

The code:

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

```
    print(i)
```

and:

```
i = 1
```

```
while i <= 10:
```

```
    print(i)
```

```
    i = i + 1
```

13.

1. This function can be called with spam.bacon().