Answer 1:-The two Boolean datatypes are True and False.

Answer 2:-The three types of Boolean operators are ‘AND’,’OR’,’NOT’

Answer 3:- Truth tables for the Boolean operators(1=True,0=False)

AND

|  |  |  |
| --- | --- | --- |
| A | B | Output |
| 0 | 0 | 0 |
| 1 | 1 | 1 |
| 1 | 0 | 0 |
| 0 | 1 | 0 |

OR

|  |  |  |
| --- | --- | --- |
| A | B | Output |
| 0 | 0 | 0 |
| 1 | 1 | 1 |
| 1 | 0 | 1 |
| 0 | 1 | 1 |

NOT

|  |  |  |
| --- | --- | --- |
| A | Output |  |
| 0 | 1 |  |
| 1 | 0 |  |
|  |  |  |
|  |  |  |

Answer 4:-

* (5 > 4) and (3 == 5)🡪False
* not (5 > 4) 🡪False
* (5 > 4) or (3 == 5) 🡪True
* (True and True) and (True == False) 🡪False
* (not False) or (not True)🡪True

Answer 5:- Six comparison operators are as follows:

* > [Greater Than]
* < [Less Than]
* == [Equal To]
* != [Not Equal To]
* >= [Greater Than or Equal To]
* <= [Less Than or Equal To]

Answer 6:- The equal to operator(==) checks the value and datatype of both the arguments and then returns a boolean output(ie True or False).

The assignment operator assigns a value to a variable.

Use Case:--

Case 1: To check two numbers are equal or not , we will use equal to operator.

if a==b:

print(“The numbers are equal”)

else:

print(“The numbers are not equal”)

Case 2:--To assign a value to a variable we will use the assignment operator.

a=2

b=3

print(a+b)

Answer 7:- These are the three block ; which are highlighted in different colours.

spam = 0

if spam == 10:

print(‘eggs’)

if spam > 5:

print(‘bacon’)

else:

print(‘ham’)

print(‘spam’ )

print(‘spam’)

Text

Description automatically generatedAnswer 8:-

spam=(input())

if spam=='1':

print("Hello")

elif spam=='2':

print("Howdy")

else :

print("Greetings!")

Answer 9:-We can use (Ctrl+C) , to exit from an infinite loop

Answer 10:- Break and continue is used in loops. If under any condition, we mention

Answer 11:-Technically in a for loop range(10),range(0,10) and range(1,10,1) will give the same result because range takes the following arguments:

range(a,b,c)

a🡪starting point [By default always taken as 0 by the system]

b🡪one value after ending point [If the end point is 10 with default value , the function will take values from 0 to 9]

c🡪It is the step [By default always taken as 1 by the system]

Chart

Description automatically generated

Answer 12:-

Using for loop

for i in range(1,11):

print(i)

Using while loop:

A picture containing table

Description automatically generatedi=0

while i<=9:

i=i+1

print(i)

Answer 13:- This function can be called with spam.bacon().