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

True

False

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

AND

OR

NOT

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 ).**

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | **B** | **AND** | **OR** |
| TRUE | TRUE | TRUE | TRUE |
| TRUE | FALSE | FALSE | TRUE |
| FALSE | TRUE | FALSE | TRUE |
| FALSE | FALSE | FALSE | FALSE |

|  |  |
| --- | --- |
| **A** | **!A** |
| TRUE | FALSE |
| FALSE | TRUE |

**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

**5. What are the six comparison operators?**

<

>

<=

>=

==

!=

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

Equl to is ==

assignment operator is =

example:

consider following line of python code

a=10

here value 10 is being assigned to variable a.

a==11

here value 11 is being checked whether varaible a has value of 11 in memory.

**7. Identify the three blocks in this code:**

*Block 1:*

spam = 0

*block2:*

if spam == 10:

print('eggs')

*Block 3:*

if spam > 5:

print('bacon')

else:

print('ham')

print('spam')

print('spam')

**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.**

anaconda-navigatorCode:

def helloworld(x):

if(x==1):

print(‘spam’)

elif(x==2):

print(‘Howdy’)

else:

print(‘Greatings!’)

if \_\_name\_\_ == '\_\_main\_\_':

spam=int(input(Enter a number: ))

helloWorld(spam)

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

In unix plotform its ctrl+c for keyboard interupt. ctrl+z also works.

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

*Break:* break terminates the loop and program control flow goes out of that loop

*Continue:* continue skips the cureent iteration of loop, control flow will be still in that loop till loop condition is false.

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

*range(0,10,1):*

1st arg is from which value

2nd arg is to which value

3rd arg is to fetch that particular value

*range(1,10):*

1st arg is from which value

2nd arg is to which value

since 3rd arg is not passed, it fetch all data from loop.

*Range(10):*

if only one argument(n) is passed , range funtion loops from 0 to n-1

**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.**

*Using for:*

for i in range(1,11):

print(i)

*Using while:*

i=1

while i<=10:

print(i)

i = i+1

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

--> spam.bacon()