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

true and 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 ).**

|  |  |  |
| --- | --- | --- |
| Operator | Condition | Result |
| AND | 1==1 AND 2==2 | True |
| AND | 1==2 AND 2==2 | False |
| OR | 1==1 OR 2==2 | True |
| OR | 1==2 OR 2==2 | False |
| NOT | 1!=2 | True |
| NOT | 1!=1 | False |

**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)) =>** True

**(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.**

Assignment operator use to initialize the value in variable, it will use when it required to store the value in variable

Equa operator use to verify the if the condition is correct or not, it will verify one condition if both left and right side are equal it will give True else False

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

**spam = 0**

**if spam == 10:**

**print('eggs')**

**if spam > 5:**

**print('bacon')**

**else:**

**print('ham')**

**print('spam')**

**print('spam')**

1 block: if spam ==10:

Print(‘eggs’)

2 block: if spam >5:

Print(‘bacon’)

3 block: else:

Print(‘harm’)

**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=1

if spam == 1:

print(“Hello”)

else if spam == 2:

print(“Howdy”)

else:

print(“Greetings!”)

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

Ctrl + c

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

Break: it use terminate the iteration and move out of the block

Continue: it force to execute the next iteration

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

Range(10): it will have value from 0 to 9

Range(0,10): it will have value from 0 to 9

Range(0,10,1): it will have value from 0 to 9 but print number the first number came after 1

Output wise it work fine there is no change

**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 i in range(1, 11):

print(i)

i=1

while i < 11:

print(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()