**PYTHON BASIC ASSIGNMENT 2**

**Question1**.What are the two values of the Boolean data type? How do you write them?

**Answer:** True and False, using capital T and F, with the rest of the word in lowercase

**Question2**. What are the three different types of Boolean operators?

**Answer:** and, or, and not

**Question3**. 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 ).

**Answer:** 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.

**Question4**. What are the values of the following expressions?

(5 > 4) and (3 == 5)

not (5 > 4)

(5 > 4) or (3 == 5)

not ((5 > 4) or (3 == 5))

(True and True) and (True == False)

(not False) or (not True)

**Answer:** False  
False  
True  
False  
False  
True

**Question5**. What are the six comparison operators?

**Answer:** ==, !=, <, >, <=, and >=.

**Question6**. How do you tell the difference between the equal to and assignment operators?Describe a condition and when you would use one.

**Answer:** == is the equal to operator that compares two values and evaluates to a Boolean, while = is the assignment operator that stores a value in a variable.

**Question7**. 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')

**Answer:** 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')

**Question8**. 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.

**Answer:** The code:  
  
if spam == 1:  
print('Hello')  
elif spam == 2:  
print('Howdy')  
else:  
print('Greetings!')

**Question9**.If your programme is stuck in an endless loop, what keys you’ll press?

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

**Question10**. How can you tell the difference between break and continue?

**Answer:** Break statement resumes the control of the program to the end of loop and made executional flow outside that loop. Continue statement resumes the control **of** the program to the next iteration of that loop enclosing 'continue' and made executional flow inside the loop again

**Question11**. In a for loop, what is the difference between range(10), range(0, 10), and range(0, 10, 1)?

**Answer:** range() is a built-in function of Python. It is used when a user needs to perform an action for a specific number of times. range()

**Question12**. 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.

**Answer:** using while loop:

i = 1

while(i<=10):

print(i)

i += 1

Using for loop:

for i in range(1, 11):

print(i)

**Question13**. If you had a function named bacon() inside a module named spam, how would you call it after importing spam?

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