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

Ans: True, False

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

Ans: And, or, not

3. Make a list of each Boolean operator \$\\$#39\$; s truth tables (i.e. every possible combination of Boolean values for the operator and what it evaluates).

Ans:

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. What are the values of the following expressions?

```
(5 > 4) and (3 == 5)
not (5 > 4)
```

$$(5 \& gt; 4) \text{ or } (3 == 5)$$

not
$$((5 \& gt; 4) \text{ or } (3 == 5))$$

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

(not False) or (not True)

Ans:False

False

True

False

False

True

5. What are the six comparison operators?

```
Ans: <,>, ==,>=,<=,!=
```

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

Ans: == is equal to the operator that compares two values and evaluates to a Boolean, while = is the assignment operator that stores a value in a variable. When we have to compare the two-variable value for any condition check we use an equal operator and when we have to assign the value to a new variable then we use the assignment operator.

```
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')
Ans:
print('ham')
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.
Ans:
if spam == 1:
      print("Hello")
elif spam == 2:
      print("Howdy")
else:
      print("Greeting")
```

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

Ans: ctrl+c

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

Ans: break means stoping the loop to run and whereas continue to mean just continue from there again the loop.

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

Ans:

for i in range(11): print(i)

I = 0

While i < 11:

print(i)

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

Ans: spam.bacon().