

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

A) True, False

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

A) 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 evaluates to).

A) True & True = True

True & False = False (same as False & True)

False & False = False

True | True = True

True | False = True (same as False | True)

False | False = 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)) - False

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

(not False) or (not True) - True

5. What are the six comparison operators?

A) ==, !=, >, >=, <, <=

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

A) assignment operator is = and equal/comparison operator is ==.

if a == 10:

print('a is 10')

a = 11 # assigning a to 11

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')
```

A)

BLOCK 1

```
if spam == 10:

    print('eggs')
```

BLOCK 2

```
if spam > 5:

    print('bacon')
```

BLOCK 3:

```
else:

    print('ham')
```

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.

```
If spam == 1:

    print("Hello")

elif spam == 2:

    print("Howdy")

else:
```

```
print("Greetings!")
```

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

A) ctrl+c

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

A) Break exits from the loop after the conditional statement is True. Continue skips the statements after it and jumps to the next iteration.

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

A) All are 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.

```
for i in range(1, 11):
```

```
    print(i)
```

```
i = 1
```

```
while i <= 10:
```

```
    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?

```
from spam import bacon
```

```
bacon()
```