

Assignment 2

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

Ans: True and False, it can be use using capital T and F.

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

Ans: 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).

Ans:

True	And	True	=	True
True	And	False	=	False
False	And	True	=	False
False	And	False	=	False
True	Or	True	=	True
True	Or	False	=	True
False	Or	True	=	True
False	Or	False	=	False
	Not	True	=	False
	Not	False	=	True

4. 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)

Ans:

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

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

not (5 > 4) = False.

(not False) or (not True) = True

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

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

5. What are the six comparison operators?

Ans: ==, !=, <, >, <=, and >=.

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 an assignment operator and its is used to store value in it and == is the equal to operator it compares two values. Used in statement that evaluate to Boolean value

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')

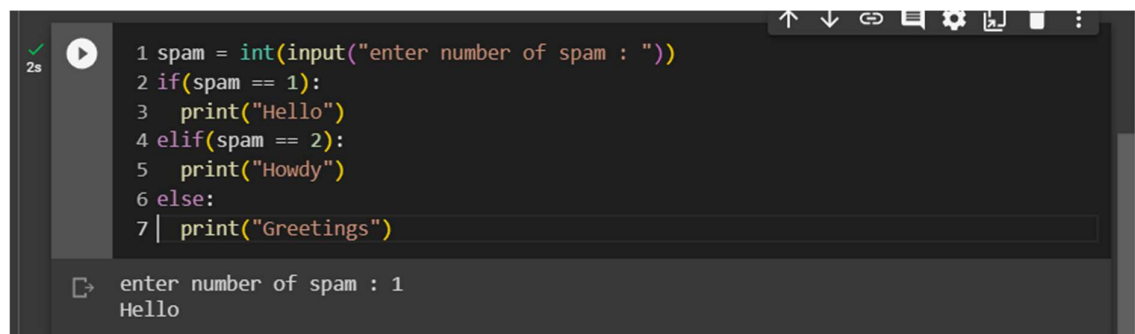
    print('spam')
```

Ans: blocks are inside if statement and lines are

print('bacon') and print('ham').

```
print('eggs')
if spam > 5:
    print('bacon')
else:
    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.



```
1 spam = int(input("enter number of spam : "))
2 if(spam == 1):
3     print("Hello")
4 elif(spam == 2):
5     print("Howdy")
6 else:
7     print("Greetings")

enter number of spam : 1
Hello
```

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 will process the execution outside and just after the loop

And continue will move the execution to the start of the loop

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

Ans: Range 10 = 0 to 9

Range(0,10) = same as above

Range(0,10,1) = its 0 to 9 but it iterate by 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.

Ans:

```
✓ [20] 1 for i in range (1,11):  
0s      2 print(i)  
  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10
```

```
✓ 1 a = 1  
0s 2 while (a<=11):  
    3 print(a)  
    4 a = a + 1  
  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11
```

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

Ans: spam.bacon().