

PYTHON BASIC

Assignment_2

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

Sol: >> True and False.

Using capital T and F, with the rest of the word in lowercase

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

Sol: AND , NOT , OR

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).

Sol: Here , True (T=1) , False (F=0)

INPUT(A)	INPUT(B)	AND (OUTPUT)	OR (OUTPUT)	NAND (OUTPUT)	NOR (OUTPUT)	XOR (OUTPU T)	NOT
T	T	T	T	F	F	F	Not True is False(0)
T	F	F	T	T	F	T	-
F	T	F	T	T	F	T	-
F	F	F	F	T	T	F	Not False is True (1)

4.What do the following expressions evaluate to?

>> (5 > 4) and (3 == 5)	>> False
>> not (5 > 4)	>> False
>> (5 > 4) or (3 == 5)	>> True
	>> False

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

```
>> (True and True) and (True == False)
```

```
>> (not False) or (not True)
```

```
>> False
```

```
>> True
```

5. What are the six comparison operators?

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

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

sol: == is the equal to operator that compares two values and evaluates to a Boolean,

= is the assignment operator that stores a value in a variable.

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')
```

sol: >> ham

```
    spam
```

```
    spam
```

>> there are 3 block spam is assign with 0 != 10 so, condition is False

>> now loop is in 4 line: 0 > 5 also False

>> now in line 6, else execute and print

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.

Solution:

try:

```
spam=int(input())
```

```
if spam == 1:
```

```
    print('Hello')
```

```
elif spam == 2:
```

```
    print('Howdy')
```

```
else:
```

```
    print('Greetings!')
```

```
except Exception:
```

```
    print("try again with integer value")
```

```
finally:
```

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

9.If your program is stuck in an endless loop, what keys will you press?

Sol: Press CTRL-C

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

sol: Break: exits the loop

continue: skip the loop

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

sol: gives the same output >>0 1 2 3 4 5 6 7 8 9

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.

Sol:

```
print(f"for Loop")
```

```
for i in range(0,11):
```

```
    print(i)
```

```
print("\n while Loop")
```

```
j=0
```

```
while j<=10:
```

```
    print(j)
```

```
    j=j+1
```

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

sol:

```
import spam
```

```
spam.becon()
```
