

assignment 2 python-Copy1

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```
[1]: #1.    What are the two values of the Boolean data type? How do you write them?
#Ans.    The two values of Boolean data type are True and False and it is written
        ↳as T and F respectively.
#eg:
```

```
a = True
b = False

print(a)
print(b)
```

True
False

```
[ ]: #2.    What are the three different types of Boolean operators?
#Ans.    The three Boolean operators are and, or and 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 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
# TRUE IS 1 AND FALSE IS 0
# Truth table for AND
#   A  B  output
#   0  0  0
#   0  1  0
#   1  0  0
#   1  1  1
# Truth table for OR
```

```
# A B output
# 0 0 0
# 0 1 1
# 1 0 1
# 1 1 1
# Truth table for NOT
# A output
# 0 1
# 1 0
```

[2]: #4. What are the values of the following expressions?

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

```
False
False
True
False
False
True
```

[]: #5. What are the six comparison operators?

#Ans. The six comparison operators are =, <, >, >= and <=.

[3]: #6. How do you tell the difference between the equal to and assignment operators? Describe a

condition and when you would use one.

#Ans The assignment operator (=) stores the value in a variable whereas equal to operator (==) compares two values

and evaluates a Boolean value.

eg

equal to operator

```
if(2==3):
```

```
    print(True)
```

```
else:
```

```
    print(False)
```

Assignment operator

c=1 #here we have used assignment operator (=) to assign the value of c

```
print("c =" ,c)
```

```
False
c = 1
```

[4]: #7. Identify the three blocks in this code.

```
#Ans.
spam = 0
if spam == 10:
    print('eggs') # Block 1
if spam > 5:
    print('bacon') # Block 2
else:
    print('ham') #Block 3
    print('spam')
    print('spam')
```

```
ham
spam
spam
```

[6]: #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.

```
spam = int(input("Input a no. "))
if spam == 1:
    print("Hello")
elif spam == 2:
    print("Howdy")
else:
    print("Greetings")
```

Input a no. 2

Howdy

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

#Ans. We have to press ctrl+ c if we have stuck in an endless loop.

[13]: #10. How can you tell the difference between break and continue?

#Ans. # Use of break

```
for i in range(10):
    if(i==7):
        break
    print(i)
```

```
print('Breaked')
```

Use of continue

```

for i in range(10):
    if(i==7):
        continue
    print(i)

# The break will move the execution outside and after a loop and the continue
↳ statement will move the execution to the start
# of the loop.

```

```

0
1
2
3
4
5
6
Breaked
0
1
2
3
4
5
6
8
9

```

[22]: #11. In a for loop, what is the difference between range(10), range(0, 10),
↳ and range(0, 10, 1)?

#Ans.

```

for i in range(10):
    print(i)
print(".....")
↳
for i in range(0, 10):
    print(i)
print("*****")
for i in range(0, 10, 1):
    print(i)

# From the below output we can conclude that all the three range do the same
↳ thing. The range(10) ranges from
# 0 to 9(excluding 10) , the range(0, 10) tells the loop to start from 0 and
↳ the range(0, 10, 1) tells the loop to increase
# the variable by 1 on each iteration.

```

```

0
1
2
3
4
5
6
7
8
9
...
0
1
2
3
4
5
6
7
8
9
*****
0
1
2
3
4
5
6
7
8
9

```

[25] : #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.
Use of for loop

```

print("For loop")
for i in range(1, 11):
    print(i)

```

Use for while loop

```

print("While loop")

```

```
a = 1
while a <= 10:
    print(a)
    a+=1
```

For loop

```
1
2
3
4
5
6
7
8
9
10
```

While loop

```
1
2
3
4
5
6
7
8
9
10
```

[]: #Q13. If you had a function named `bacon()` inside a module named `spam`, how would you call it after importing `spam`?

#Ans This function can be called with `spam.bacon()`.