

```

n = 3
while n > 0:
    if (n == 5):
        n = -99
    print(n)
    n = n + 1

```

<u>n</u>	<u>print</u>
3	3
4	4
5 -99	-99
-98	

What does this code print?

A. 3
4

B. 3
4
5

C. 3
4
-99

D. 3
4
5
-99

Answer: C

With each iteration n will be

3

4

5 (which triggers if statement), then -99

so this code will print

3

4

-99

A valid password is one that is length 5 and starts with "xy". A valid password should terminate the loop. Which of these implements that specification? Note, the input function prints its argument as a prompt and returns whatever the user types as a string (after the user hits enter).

A.

```
while True:
    s = input("Enter a password: ")
    if len(s) == 5 and s[:2] == 'xy':
        break
```

B.

```
s = input("Enter a password: ")
while len(s) != 5 and s[:2] != 'xy':
    s = input("Enter a password: ")
```

not

)

C. Both A & B are correct

D. Neither A or B are correct

Answer: A

A is correct, the loop will continue until s satisfies the specifications. B is incorrect as the loop will continue while s meets the specification, not terminate.

```
a = 0
i = 0
while i < 10:
    a = a + 1
```

Will this loop terminate, be guaranteed to be an infinite loop or will it depend?

- A. Terminate or not execute
- B. Infinite loop
- C. Depends
- D. Syntax error

Answer: B

This is loop will be an infinite loop because the loop body does not change i, which remains < 10, and thus the loop conditional remains True forever. Recall for a loop to terminate, something inside the loop needs to change the loop conditional (or we need a break statement).