



Test

Test on While Loops in Python

Multiple Choice Questions (MCQs):

1. Which statement is a correct syntax to break out of a loop?
 - a) end
 - b) return
 - c) break
2. Print `i` as long as `i` is less than 18.

```
i = 1
__ i < 18 __
print(i)
i += 1
```

3. Stop the loop if `i` is 3.

```
i = 1
while i < 6:
    if i == 3:
        __
    i += 1
```

4. What is the correct syntax for a while loop in Python?
 - a) while x > 0 { print(x) }
 - b) while x > 0: print(x)
 - c) while (x > 0) [print(x)]
 - d) while x > 0 do print(x)
5. What will be the output of the following code?

```
x = 3
while x > 0:
    print(x)
    x -= 1
```

- a) 1 2 3
 - b) 3 2 1
 - c) 3 2
 - d) 3 2 1 0
6. How can you prevent an infinite loop when using a while loop?
- a) Ensure the condition eventually becomes False
 - b) Use a for loop instead
 - c) Python automatically prevents infinite loops
 - d) Use a return statement inside the loop
7. What will happen if the while condition is always True?
- a) The program will stop execution immediately
 - b) The loop will run indefinitely (infinite loop)
 - c) The loop will execute once
 - d) Syntax error will occur
8. What does the `break` statement do inside a while loop?
- a) Skips the current iteration and moves to the next
 - b) Exits the loop immediately
 - c) Restarts the loop from the beginning
 - d) Causes a syntax error

Practical Questions

1. Write a Python program using a while loop to print numbers from 10 down to 1.
2. Write a while loop that prints all even numbers between 1 and 20.
3. Modify the following code to stop when `x` becomes 3 using a `break` statement:

```
x = 10
while x > 0:
```

```
print(x)  
x -= 1
```

4. Write a program that keeps asking the user to enter a number until they enter a negative number.
5. Write a Python program that uses a while loop to calculate the sum of numbers from 1 to 50.