

## Python Fundamentals Course: Session 3.2 Take Home Quiz

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Highlight the correct answer choice for each question

### Questions

1. What will nested 'for i in range(2): for j in range(2):' print?
  - a. 0 0, 0 1, 1 0, 1 1
  - b. 0 1, 1 0
  - c. 0 0, 1 1
  - d. 2 2
2. What does zip([1,2], ['a','b']) produce?
  - a. [(1,'a'), (2,'b')]
  - b. [1,'a',2,'b']
  - c. [1,2,'a','b']
  - d. Error
3. When does a while loop stop?
  - a. After fixed iterations
  - b. When condition becomes False
  - c. Never
  - d. When break called
4. What does break do?
  - a. Pauses loop
  - b. Exits loop entirely
  - c. Skips to next iteration
  - d. Restarts loop
5. What does continue do?
  - a. Exits loop
  - b. Skips to next iteration
  - c. Pauses execution
  - d. Restarts from beginning
6. What will: x = 5; while x > 0: x -= 1; print(x) output last?
  - a. 0
  - b. 1
  - c. -1
  - d. 5
7. How many times: matrix = [[1,2],[3,4]]; count = 0; for row in matrix: for val in row: count += 1
  - a. 2
  - b. 4
  - c. 6
  - d. 8
8. What is batch processing in ML?
  - a. Processing all data at once
  - b. Processing data in small groups
  - c. Processing one item
  - d. No processing

9. What command merges branch into current?

- a. `git merge branch-name`
- b. `git combine branch-name`
- c. `git add branch-name`
- d. `git join branch-name`

10. Good use case for while loops in ML?

- a. Processing fixed datasets
- b. Training until convergence
- c. Creating lists
- d. Sorting data