



Test

Test: Lists in Python

Section 1: Multiple Choice Questions (MCQs)

1. How do you add an item to the end of a list in Python?
 - a) `list.add(item)`
 - b) `list.append(item)`
 - c) `list.insert(item)`
 - d) `list.extend(item)`
2. What method removes a specific item from a list?
 - a) `remove()`
 - b) `delete()`
 - c) `discard()`
 - d) `pop()`
3. What will be the output of the following code?

```
my_list = [3, 1, 4, 1, 5]
my_list.sort()
print(my_list)
```

- a) `[3, 1, 4, 1, 5]`
 - b) `[1, 1, 3, 4, 5]`
 - c) `[5, 4, 3, 1, 1]`
 - d) `[1, 3, 4, 5, 1]`
4. Which of the following statements correctly creates a copy of a list?
 - a) `new_list = old_list.copy()`

- b) `new_list = list(old_list)`
- c) All of the above

5. What is the result of the following operation?

```
list1 = [1, 2, 3]
list2 = [4, 5]
list3 = list1 + list2
print(list3)
```

- a) `[1, 2, 3, 4, 5]`
- b) `[1, 2, 3, [4, 5]]`
- c) `[[1, 2, 3], [4, 5]]`
- d) `[4, 5, 1, 2, 3]`

Section 2: Practical Questions

1. Write a Python program to add the following items to a list and print the final list:
 - Create a list with initial values: `['apple', 'banana', 'cherry']`
 - Add 'orange' to the list.
 - Insert 'grape' at the second position.
 - Print the final list.
2. Write a Python function that removes all occurrences of the number `3` from a given list.
3. Given a list of numbers: `[9, 3, 6, 1, 8, 2]`, write a Python program to sort the list in ascending order and print the result.
4. Write a Python program to create a copy of a list and modify the copied list without changing the original list.
5. Write a Python program to join two lists:

```
list1 = ['Hello', 'Python']
```

```
list2 = ['World', '!']
```

The output should be: `['Hello', 'Python', 'World', '!']`