

# Python List - Assignment

## . Basics

1. Create a list of 5 favorite movies.
  2. Create a list with mixed data types ( `int` , `str` , `float` , `bool` ).
  3. Create a nested list (list inside another list).
  4. Access the first element of a list.
  5. Access the middle element of a list.
  6. Access the last element of a list.
  7. Use negative indexing to get the second-last element.
  8. Print the first 3 elements of a list using slicing.
  9. Print the last 3 elements of a list using slicing.
  10. Reverse a list using slicing.
  11. Replace the second element with `"Python"` .
  12. Change the last two elements to `"Done"` and `"Finish"` .
  13. Concatenate two lists.
  14. Repeat a list 3 times using .
  15. Check if `"apple"` exists in a list using the `in` operator.
- 

## 2. Working with List Methods

Start with:

```
numbers = [5, 2, 9, 1, 5, 6]
fruits = ["apple", "banana", "cherry"]
```

1. Append `"orange"` to `fruits` .

2. Insert `"kiwi"` at index 1 in `fruits` .
  3. Remove `"banana"` from `fruits` .
  4. Pop the last item from `numbers` .
  5. Clear all elements from a copy of `fruits` .
  6. Sort `numbers` in ascending order.
  7. Sort `numbers` in descending order.
  8. Reverse `fruits` without sorting.
  9. Sort `fruits` alphabetically.
  10. Count how many times `5` appears in `numbers` .
  11. Find the index of `"cherry"` in `fruits` .
  12. Create a shallow copy of `numbers` and modify it — check if the original changes.
- 

### 3. Mini Tasks

1. Create a list of 10 numbers and get the **maximum value** using `max()` .
2. Create a list of 10 numbers and get the **minimum value** using `min()` .
3. Create a list of 10 numbers and find the **sum** using `sum()` .
4. Check if all elements in a list are `True` using `all()` .
5. Check if any element in a list is `True` using `any()` .
6. Get the length of a list using `len()` .
7. Convert a string `"apple"` into a list of characters using `list()` .
8. Create a list from a tuple `(1, 2, 3, 4)` .
9. Create a list from a range of numbers from 1 to 5 using `list(range())` .