

## Assignment-2

1. Write a Python function that takes two lists and appends all elements of the second list to the first using both `append()` and `extend()`.
2. Given a list of numbers, insert 100 at index 2 and then remove the first occurrence of 50.
3. Create a list of cars. Use the `pop()` method to remove the last element, and then find the index of "tata punch" in the list.
4. Write a Python program that takes a list of integers, reverses it, sorts it in ascending order, and prints both the reversed and sorted lists.
5. Write a Python function that takes two lists, concatenates them, and then repeats the resulting list 3 times.
6. Write a function that takes a string as input, converts it to uppercase, then to lowercase, and returns both.
7. Given a string "Hello, world! Hello, Python!", replace "Hello" with "Hi" and find the position of "Python" in the modified string.
8. Write a program that takes a sentence, splits it into words, and then joins the words back using a "-" separator.
9. Write a function that takes two strings, concatenates them, and then repeats the concatenated string 4 times.
10. Given the string "PythonProgramming", extract the substring "Python", "Programming", and print every alternate character from the full string.
11. Write a function that checks if a given number exists in a list. If it exists, print "Number found", otherwise print "Number not found".
12. Write a function that checks if a given list is empty. If it is, print "List is empty", otherwise print "List has elements".
13. Given a list of numbers, use an if condition inside a loop to remove all even numbers.
14. Take two lists as input. If they have the same elements in the same order, print "Lists are identical"; otherwise, print "Lists are different".
15. Write a function to check if a given string is a palindrome (reads the same forward and backward). If it is, print "Palindrome"; otherwise, print "Not a palindrome".
16. Given a string, count the number of vowels (a, e, i, o, u). If the count is greater than 5, print "Lots of vowels", else print "Few vowels".
17. Write a function that checks if a given string starts with a vowel. If it does, print "Starts with a vowel", otherwise print "Does not start with a vowel".
18. Take two strings as input. If they contain the same characters in a different order, print "Anagrams", otherwise print "Not anagrams".
19. Write a function that checks the strength of a password based on these conditions:
  - If the length is less than 6, print "Weak password".
  - If it contains only letters, print "Moderate password".
  - If it contains letters and numbers, print "Strong password".