**Note:**

**1) Make a copy of provided colab link**

**2) Write your code & execute with output cell in the colab or notebook**

**3) Share the final submission through  colab link or ipynb file**

**COLAB LINK:** <https://drive.google.com/file/d/10_tRHkwKUnK-AYEEOpjZIh5bi12NtWKg/view?usp=drive_link>

**1. Write a python program to identify the words containing both the characters as well as numbers.**

**Constraints:**

**a. Take a string from user**

**b. Create a list to store words of a string**

**c. Apply logic to get the words containing both characters and numbers**

**d. Print that list containing both characters and numbers**

**Concepts to be used:  Use functions like isalpha(), any(), isdigit(), etc; loops**

**Sample Input: Enter Original String: Welcome2 our luxurious 5star hotel**

**Sample Output:**

**Welcome2**

**5star**

**2.** **Write a python program which contains two strings and then return the combination of those strings by combining those two strings inversely.**

**Constraints:**

**a. Take two strings from user**

**b. Compare their lengths**

**c. Apply the logic to combine the strings and print the characters side by sie inversely (can use slicing concept, don’t use string functions except len(), don’t create functions)**

**d. Print the resultant string**

**Concepts applied : Loops, slicing**

**Sample Input :**

**s1 - “Apple”**

**s2 - “Mango”**

**Sample Output : Aopgpnlaem**

**3. Write a python program to sort the characters in such a way that all the uppercase letters should come at last.**

**Constraints:**

**a. Take string from user and display it**

**b. Apply the logic to print the lowercase characters followed by uppercase characters by using for loop and if-else**

**c. Print the result**

**Concepts: strings, loops**

**Sample Input:**

**Original String:' Original String:'**

**Sample Output:**

**Original String: TransOrgAnalytics**

**Result: ransrgnalyticsTOA**