

STRING INBUILT FUNCTIONS TASKS (Sections A, B, C, D)

A. CASE CONVERSION (upper, lower, title, capitalize, swapcase)

1. Convert the string "hello world" into uppercase.
2. Convert "PYTHON PROGRAMMING" to lowercase.
3. Convert "data science with python" to title case.
4. Convert "mAtHematIcs" so the first letter is uppercase and rest lowercase.
5. Swap the case of all characters in "Hello PyThOn".

B. SEARCHING & FINDING (find, rfind, index, count, startswith, endswith)

6. Find the first occurrence of "is" in "This is a physics class".
7. Count how many times "a" appears in "banana".
8. Check whether "machine learning" starts with "machine".
9. Check if "introduction to ai" ends with "ai".
10. Find the last occurrence of "e" in "engineering" using rfind().

C. VALIDATION (isdigit, isalpha, isalnum, isspace, islower, isupper)

11. Check if "12345" contains only digits.
12. Check if "Data123" is alphanumeric.
13. Check if "hello" is alphabetic.
14. Check if " " contains only whitespace.
15. Check whether "PYTHON" is uppercase.

D. MODIFYING STRINGS (replace, split, join, strip, lstrip, rstrip)

16. Replace "bad" with "good" in "Python is not bad".
17. Split "apple,banana,mango" by comma.
18. Join ["a","b","c"] with hyphens to get "a-b-c".
19. Remove leading and trailing spaces from " hello world ".
20. Remove only the left spaces from " python".