

PYTHON

Assignment

1. Write a program to reverse the string "Python" and print the reversed string.
2. Write a program to check if the string "madam" is a palindrome (a word that reads the same forwards and backwards).
3. Write a program to count the number of vowels in the string "This is an example sentence."
4. Given the string "Programming is awesome", extract and print the substring "awesome".
5. Write a program to replace every second character in the string "1234567890" with an asterisk (*).
6. Convert the string "hello world from python" to title case, where each word starts with an uppercase letter.
7. Given the string "banana", find and print the index of the last occurrence of the letter "a".
8. Write a program to split the sentence "Learning Python is fun" into words, reverse the order of words, and then join them back into a sentence.
9. Compare the two strings "data" and "DATA" for equality, ignoring the case.
10. Given the string " spaced out ", write a program to remove all whitespaces and print the result.
11. Write a program to calculate the frequency of each character in the string "apple".

12. Write a program to check if a given string follows the format of a valid email address (e.g., contains "@" and ".").
13. Write a program to count the number of words in the sentence "Python is a great programming language."
14. Write a program to toggle the case of all characters in the string "PyThOn Is FuN". (Uppercase letters should become lowercase, and vice versa.)
15. Given the sentence "The quick brown fox jumps over the lazy dog", replace the word "fox" with "cat" only if it is the 4th word in the sentence.

