1. Write a program that automatically converts English text to Morse code and vice versa.
2. Write a program that finds the longest palindromic substring of a given string. ‘**karak**is’, ‘ba**erre**n’, ‘**kajak**’, ‘**inni**’.
3. Given two strings, write a program that efficiently finds the longest common subsequence. ‘ka**rol** **rol**ki’
4. Write a code that multiplies two matrices together. Dimension validation required.