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) Given two strings, write a program that outputs the shortest sequence of character insertions and deletions that turn one string into the other.
   a. INPUT:'free -> ferie'
   b. OUTPUT:
      i. Insert at [1] value 'e': feree
      ii. Insert at [3] value 'i': feriee.
      iii. Delete at [5]: ferie
5) Write a code that multiplies two matrices together. Dimension validation required.