#include <stdio.h>

#include <string.h>

void search(char\* pat, char\* txt)

{

    int M = strlen(pat);

    int N = strlen(txt);

    /\* A loop to slide pat[] one by one \*/

    for (int i = 0; i <= N - M; i++) {

        int j;

        /\* For current index i, check for pattern match \*/

        for (j = 0; j < M; j++)

            if (txt[i + j] != pat[j])

                break;

        if (j == M) // if pat[0...M-1] = txt[i, i+1, ...i+M-1]

            printf("Pattern found at index %d \n", i);

    }

}

/\* Driver program to test above function \*/

int main()

{

    char txt[] = "AABAACAADAABAAABAA";

    char pat[] = "AABA";

    search(pat, txt);

    return 0;

}