Homework Project 3

Given 10/23/2019, Due 11/26/2019

The aim of the project is to create a function that implements the Rabin-Karp Algorithm to search for any occurrence of any of a set of forbidden substrings in a long string (e.g., any virus fragment in a long program binary). All strings are '\0'-terminated. The function prototype is:

```
int multi_string_match(int k, char forbidden_strings[][8],
                       int n, char input_string[]);
```

The function takes an array of `k` forbidden strings, each of them of length 8, and an input string of length `n`, and checks whether any of the forbidden strings occurs in the input string. If it finds the a forbidden string, it returns the index at which it starts, else it returns -1. So for forbidden string ``abcdabc'' and input string ``abcabcdabcd'' it will return 3.

Submit your source code by e-mail to `phjmbrass@gmail.com`; include the course (I06) and homework number in the subject line, and your name as a comment in the homework file. If you submit multiple files, you can pack them with the `tar` archiver.