

**Homework Project 4**

Given 05/08/2017, Due 05/18/2017

Write a function that performs simultaneous search for multiple patterns on a long string, using the Rabin-Karp algorithm. The function

```
int multi_string_search(char *s, char **t, int k, int l)
```

has the following arguments

- the data string **s** in which we search,
- the array of pattern strings **t**,
- the number of pattern strings **k**,
- the length of the pattern strings **l**

The function returns the position of the start of the first pattern that occurs in **s**, or -1 if none of the patterns occurs. We count the position from 0, so “work” occurs in “homework” at position 4.