

ADVANCED ALGORITHMS

ASSIGNMENT – 1

Implementation of Rabin-Karp:

Implement Rabin-Karp algorithm and run your program on the following scenarios:

a) Match 10 different patterns against a binary text T of size at least 1MB. Take patterns of length at least 100. Implement using two different hash functions and compare your output.

b) Implementation should allow the files to be taken as command line arguments and the output gives (i) number of comparisons involved along with (ii) the number of spurious hits in each case and (iii) value of $(\text{\#comparisons}/|T|)*100$ for every pattern.