

## **Group 1:**

I'D: 1373 to 1390

Problem 1 (3.15) - Consider the pattern  $P = a^3ba$ . Construct the table and the corresponding labeled directed graph used in the **second (fast)** pattern matching algorithm.

$T_1 = abbabaabb$ , (to solve this text you have to construct a table form group 4 pattern)

$T_2 = abaabbabaa$ . (to solve this text you have to construct a table form group 4 pattern)

Problem 2 - Consider the pattern  $P_1 = 0001$ ,  $P_2 = 111$  Using the **first (slow)** pattern matching algorithm.

$T = 10010000110010001$

## **Group 2:**

I'D: 1391 to 1405

Problem 1 (3.15) - Consider the pattern  $P = aabacbc$ . Construct the table and the corresponding labeled directed graph used in the **second (fast)** pattern matching algorithm.

$T = abcaabaccbcaabbcbc$ .

Problem 2 - Consider the pattern  $P = abc$ . Using the **first (slow)** pattern matching algorithm.

$T_1 = a^{10} (aaaaaaaaaa)$

$T_2 = (cbab)^{10}$

## **Group 3:**

I'D: 1406 to 1418

Problem 1 (3.16) - Consider the pattern  $P = a^3bc^2$ . Construct the table and the corresponding labeled directed graph used in the **second (fast)** pattern matching algorithm.

$T = aaabcaabbcaabccb$ .

Problem 2 - Consider the pattern  $P = a^5b$ . Using the **first (slow)** pattern matching algorithm.

$T_1 = (a^5c)^5$

$T_2 = aa^2bb^2(a^5b)^5$

## **Group 4:**

I'D: 1419 to 1479

Problem 1 (3.16) - Consider the pattern  $P = aba^2b$ . Construct the table and the corresponding labeled directed graph used in the **second (fast)** pattern matching algorithm.

$T_1 = b^3a^3ba^2$  (to solve this text you have to construct a table form group 1 pattern)

$T_2 = a^3bc^2ab^2$  (to solve this text you have to construct a table form group 1 pattern)

Problem 2 - Consider the pattern  $P_1 = 321$ ,  $P_2 = 333$ . Using the **first (slow)** pattern matching algorithm.

$T = 3201232302313210123$

## **For All Group:**

Problem 3 (3.12) – Suppose U is the text 'MARC STUDIES MATHEMATICS'. Use INSERT to change U so that reads:

- (a) MARC STUDIES ONLY MATHEMATICS.
- (b) MARC STUDIES MATHEMATICS AND PHYSICS.
- (c) MARC STUDIES APPLIED MATHEMATICS.