

TIN

2016 / 2017

ÚLOHA 4

FILIP GULÁN

XGVLAND00

OBSAH

PRÍKLAD 1 1

PRÍKLAD 2 2

PRÍKLAD 3 3 - NEVYPRACOVANÉ

PRÍKLAD 1

$$\text{SUM}(a_1, d, k) = \pi_1^3 \circ \text{HELP}(a_1, d, k)$$

$$\text{HELP}(a_1, d, 0) = \pi_1^2 \times \pi_1^2 \times \pi_1^2(a_1, d)$$

$$\text{HELP}(a_1, d, k+1) = \pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d)) \times (\text{PLUS} \circ (\pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d))))$$

$$(\cancel{a_1, d, k}, \cancel{a_1, d, k}) \rightarrow (a_1, d, k, \text{HELP}(a_1, d, k)) \quad \leftarrow$$

VYČÍSLENIE NA $\text{SUM}(4, 2, 3)$

$$\text{SUM}(4, 2, 3) = \pi_1^3 \circ \text{HELP}(4, 2, 3) = 18$$

$$\text{HELP}(4, 2, 3) = \pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d)) \times (\text{PLUS} \circ (\pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d))))$$

$$(4, 2, 2, \text{HELP}(4, 2, 2)) = (18, 10, 28)$$

$$\text{HELP}(4, 2, 2) = \pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d)) \times (\text{PLUS} \circ (\pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d))))$$

$$(4, 2, 1, \text{HELP}(4, 2, 1)) = (10, 8, 18)$$

$$\text{HELP}(4, 2, 1) = \pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d)) \times (\text{PLUS} \circ (\pi_6^6 \times (\text{PLUS} \circ (\pi_5^6 \times d))))$$

$$(4, 2, 0, \text{HELP}(4, 2, 0)) = (4, 6, 10)$$

$$\text{HELP}(4, 2, 0) = \pi_1^2 \times \pi_1^2 \times \pi_1^2(4, 2) = (4, 4, 4)$$

PRÍKLAD 2

- ČASOVÁ ZLOŽITOSŤ STROJA M_L JE KVADRATICKÁ $O(n^2)$ PRETOŽE STROJ PRE KAŽDÉ A NA PÁSKE ($O(n)$) VYKONÁVA POSUNY DOPRAVA/DOLAVA ($O(n)$).
- PRIESTOROVÁ ZLOŽITOSŤ STROJA M_L JE LINEÁRNA $O(n)$ PRETOŽE POČTOM a ZA LINEÁRNE ZVRŠUJE PRIESTOR, KTORÝ JE PÔRBNÝ NA PÁSKE.

3. PŘÍKLAD

NEVYPRACOVANÉ !!!