Technische Universität München
Fakultät für Informatik
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Problem Sheet 1
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Python For Fine Programmers

Problem 1 (6 Points)

Tower of Hanoi: Write a program to solve the problem of tower of Hanoi. The disks could be represented as numbers where a larger number represents are larger disc; and the needles could be three positions in a LIST.

Problem 2 (8 Points)

Implement Bubblesort and Binary Search (One could read the numbers into a List and then do the sorting)

Problem 3 (8 Points)

Number to Word Conversion Write two python functions, which converts a given integer to its word representation. The two functions differ as follows

1. The given number is written to the input each digit by digit. An input of "456" should print "four five six" to the screen.

2. The given number's value, in words, has to be printed to the screen. The input "456" should give an output "four hundred and fifty six". The input size may be limited to ten thousand.

Problem 4 (4 Points)

Product of elements in an ARRAY. Write a program for the following.
There is a List $A[n]$ of n integers. You have to create another List $Output$ such that $Output[i]$ will be equal to the product of all the elements of A except $A[i]$.
Using a division operator is not permitted.