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Exercise No. 11
Algorithms and Methods for Distributed Storage
Winter 2008/2009

Exercise 11 *Allocation and Linear Programming*
Consider the following servers

- s_1 with size 500 GB and bandwidth 100 MB/s

- s_2 with size 100 GB and bandwidth 50 MB/s

- s_3 with size 1 GB and bandwidth 1000 MB/s

and the following documents

- d_1 with size 100 GB and popularity $\frac{1}{111}$

- d_2 with size 5 GB and popularity $\frac{100}{111}$

- d_3 with size 100 GB and popularity $\frac{10}{111}$

Determine the matrix A and vectors b and c for the linear programming problem which describes the optimal solution with respect to

1. **AvSeqTime** and

2. **AvParTime**.