

Homework 8. Selection of indexes

The three remaining homeworks will be shorter than usual due to the fact that we do not have enough TA hours to mark them.

Review an exercise at the end of *Lecture 13 – Indexes* (or *section 8.4.3* in the book). Suppose that the relation StarsIn requires now 100 pages rather than 10, but all other assumptions of this example continue to hold. Give formulas in terms of p_1 and p_2 to measure the cost of queries Q_1 and Q_2 and insertion I under the four combinations of index/non index discussed in the example.

Compare with the results in the example for:

$$p_1 = p_2 = 0.1$$

$$p_1 = p_2 = 0.4$$

$$p_1 = 0.5, p_2 = 0.1$$

$$p_1 = 0.1, p_2 = 0.5$$