

Homework, the 3rd series

Deadline: Monday 27 May, 2013, 23:59

We say that an alternating Turing machine *makes k alternations* if, in any computation, it switches from an existential to a universal state or *vice versa* no more than k times. Suppose a language L is recognized by a machine, which makes k alternations and works in polynomial space. Show that L can be also recognized by a deterministic machine working in polynomial space, i.e., $L \in PSPACE$.