For randomized parallel algorithms, we recommend Alon, Babai and Itai (1986); Anderson (1987); Luby (1986) and Spirakis (1988).

A large batch of newly-published papers include Aiello, Rajagopalan and Venkatesan (1998); Albers (2002); Alberts and Henzinger (1995); Arora and Brinkman (2002); Bartal and Grove (2000); Chen and Hwang (2003); Deng and Mahajan (1991); Epstein, Noga, Seiden, Sgall and Woeginger (1999); Froda (2000); Har-Peled (2000); Kleffe and Borodovsky (1992); Klein and Subramanian (1997); Leonardi, Spaccamela, Presciutti and Ros (2001); Meacham (1981) and Sgall (1996).

Exercises

11.1 Write a program to implement the randomized algorithm for solving the closest pair problem. Test your algorithms.

11.2 Use the randomized prime number testing algorithm to determine whether the following numbers are prime or not:

13, 15, 17.

11.3 Use the randomized pattern matching algorithm on the following two strings:

$X = 0101$

$Y = 0010111$

11.4 Use the algorithm introduced in Section 11–5 to determine whether 5 is a quadratic residue of 13 or not. Show an example in which you would draw a wrong conclusion.

11.5 Read Section 8–5 and 8–6 of Brassard and Bratley 1988.

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Agarwal and Sharir
Guibas, Sharir and
(1987); Clarkson
; Goldwasser and
Stein (1996); Karp
1991); Matousek
Vazirani (1987);
o (1994); Wenger