1. Write pseudo code to merge A and B, two sorted arrays of integers, stored in a single array of length *n*. Use at most *n/2* extra storage cells, where
2. length[A] ≤ length[B]
3. length[A] > length[B]

2. Suppose you need to solve the shortest path problem. What data structure would you use

1. for sparse graphs?
2. for dense graphs?

3. Suppose you need to search an array of records sorted on some key field. What method would you use if

1. the distribution of key values is unknown
2. the distribution is normal
3. the distribution is uniform

Note. These are meant merely as tune-up problems. We mostly want you to think about them, and to take your best shot at answers. Grading will be uncharacteristically liberal (unless you fail to make some sort of serious effort).