

**Exercise 2.3-4:**

Here we only consider the number of shifts in the procedure.

Best case:

$$\because T(1) = 0 \text{ and } T(n) = T(n-1) + 1$$

$$\therefore T(n) = n - 1$$

Worst case:

$$\because T(1) = 0 \text{ and } T(n) = T(n-1) + n - 1$$

$$\therefore T(n) = 1 + 2 + \cdots + (n-1) = \frac{n(n-1)}{2}$$