

Section 4.10, p. 225: #3, 4, 6, 7, 27(b,c)

Additional Problems:

1. Make a trace table for the linear search, search among {3, 14, 10, 12, 6, 15, 11, 7}
  - a. search for 15
  - b. search for 5;
2. Make a trace table for the binary search, search among {3, 6, 7, 10, 11, 12, 14, 15}
  - a. (a) search for 6
  - b. (b) search for 13
- 3.

Find the final values of  $j$ ,  $s$ , and  $t$  after the following algorithm is executed.

```
 $j := -2$   
 $s := 5$   
 $t := 10$   
while  $j \neq 3$   
  if ( $j < 0$  or  $j = 2$ )  
    then  $t := t + j$   
    else  $s := s - 1$   
     $j := j + 1$   
end while
```

(See back for flow chart for #3)

