

```

public static void kmpSearch( int[] target, int[] query ) {
    int targetLen = target.length;
    int queryLen  = query.length;
    // Compute the delta table.
    int[] delta = new int[queryLen+1];
    delta[0] = -1;
    for(int i = 0, j = -1; i < queryLen; i++, j++, delta[i]=j){
        while( (0 <= j) && query[i] != query[j] ) j = delta[j];
    }
    // Search the target for the query using the KMP shift rule.
    for(int i = 0, j = 0; (i < targetLen) && (j < queryLen); i++, j++){
        if(target[i] != query[j]){ // 0 <= j at this moment.
            j = delta[j];
            while( (0 <= j) && (target[i] != query[j]) ) j = delta[j];
        }else
            if(j == queryLen-1){ // Print positions of query occurrences.
                System.out.print(i-j+" ");
                i++; ← Delete this statement.
                j = delta[queryLen] -1;
            }
    }
}
}

```

The version in the book does not output all the occurrences of the query when target = AAAAAA and query = AAA, for example, because of the extra increments of **i** and **j**.