

My Solution on Section1 - Cleaning PunchCards

This is my Solution of "Section1 - Cleaning PunchCards" from the [Computer Science Course CS106A](#) of [Prof. Mehran Sahami](#) at the [STANFORD University](#).

[Section1.java](#)

```
/*
 * File: Section1.java
 * -----
 * Karel checks a punch card for half punched holes and cleans
 * those up. holes where the middle thingy is still existend
 * are considered as valid.
 */
import stanford.karel.*;

public class Section1 extends SuperKarel {
    /**
     * Specifies the program entry point.
     */
    public void run() {
        while( frontIsClear() ) {
            move();
            checkAndCleanHole();
            move();
        }
    }

    private void checkAndCleanHole() {
        /* This Method checks the current hole Karel is standing in and
         * cleans it up completly IF required.
         *
         * pre-condition:    karel sitting in the middle of a hole (on
Y=3),
         *
         *                    facing EAST
         *
         * post-condition:   karel sitting in the middle of a hole
(on Y=3),
         *
         *                    facing EAST
         */
        if( noBeepersPresent() ) {
            cleanLeft();
            cleanRight();
        }
    }

    private void cleanLeft() {
```

```
    /* This Method cleans the LEFT side of a Hole
    *
    *   pre-condition:   karel sitting in the middle of a hole (on
Y=3),
    *
    *                   facing EAST
    *
    *   post-condition:  karel sitting in the middle of a hole
(on Y=3),
    *
    *                   facing EAST
    */
    turnLeft();
    move();
    pickAllBeepers();
    turnAround();
    move();
    turnLeft();
}

private void cleanRight() {
    /* This Method cleans the RIGHT side of a Hole
    *
    *   pre-condition:   karel sitting in the middle of a hole (on
Y=3),
    *
    *                   facing EAST
    *
    *   post-condition:  karel sitting in the middle of a hole
(on Y=3),
    *
    *                   facing EAST
    */
    turnRight();
    move();
    pickAllBeepers();
    turnAround();
    move();
    turnRight();
}

private void pickAllBeepers() {
    /* This Method picks up ALL Beepers at Karels actual position
    */
    while( beepersPresent() ){
        pickBeeper();
    }
}
}
```

[java](#), [karel](#), [stanford](#), [university](#), [cs106](#), [computer](#), [science](#), [learning](#), [programming](#)

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