

Lab 14

Self-check 2: P. 382

	Hashcode	% 7	Pos Linear	Pos chain	% 13	Pos Linear	Pos Chain
"Tom"	84274	1	1	1	8	8	8
"Dick"	2129869	0	0	0	1	1	1
"Harry"	694964448	0	2	0	8	9	8
"Sam"	82879	6	6	6	4	4	4
"Pete"	2484038	4	4	4	11	11	11

Self-check 3:

a.) $24 \div 5 = [4]$, linearly $\rightarrow [0]$ so element 24

b.)

0	20
1	6
2	
3	
4	24 \rightarrow 14

Programming #1: Assuming table is static

```

public static int objectLocation(Object obj) {
    int index = obj.hashCode() % table.length;
    if (table[index] == null)
        return -1;
    else if (table[index].compareTo(obj) == 0)
        return index;
    else
        while (table[index].compareTo(obj) != 0)
            index++;
    return index;
}

```