

Language Based Security

Winter Semester 2008

Exercise sheet 2.

5 Nov 2008

Exercise 1:

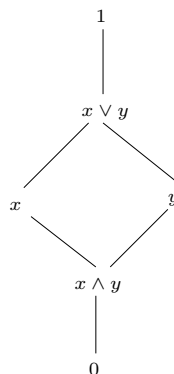
Consider the following C program.

```
main () {  
    char s[20];  
    int i,j;  
    for (i=0; i<=10; i++) {  
        j = 2*i;  
        s[j] = 'a';  
    }  
}
```

- Produce the instrumented C program for cleanness analysis.
- Produce an integer program by removing other kinds of data from the program.
- Compute the least solution of the constraint system \mathcal{V} as described in the lecture.

Exercise 2:

Consider the complete lattice M of monotone Boolean functions in two variables:



- Give the set of all monotone functions from the lattice M to the complete lattice $\{0, 1\}$ with $0 < 1$.
- Give the ordering of these functions.