

## CS 6363: Advanced Compiler Construction

Jan 27, 2010

You Name:

1. Given the following loop nest,

```
K = 1
do J = 3, N-1, 2
    K = K + 2;
S1: RX(K,J) = RX(J,J) * 2
    S = J
    do I = 2, N-1, 2
        S=S-1
S2:    RX(I,S) = RX(I,S-1) / 2
    enddo
enddo
```

- (a) First perform loop normalization, then apply loop induction variable substitution