

Homework Assignment 4

(Due 2:00pm, Dec. 11, email to daehyun.kim@wsu.edu)

Late submissions will not be accepted.

* You can use the following instruction for a multiplication:

MUL Rd, Rs1, Rs2 // Rd = Rs1 * Rs2 (e.g., MUL R2, R4, R6 means R2 = R4 * R6)

MUL Rd, Rs, #imm // Rd = Rs * #imm (e.g., MUL R3, R0, #5 means R3 = R0 * 5)

1. (100 points) Make an assembly code **only for the nested for loop**. You can use R0 for variable i and R1 for variable k. The memory figure shows the current stack pointer (SP) and the memory spaces used for variable x and y.

```
int y[2][3];

int** x = new int*[2];

for ( int i = 0 ; i < 2 ; i++ )
    x[i] = new int[3];

for ( int i = 0 ; i < 2 ; i++ ) {
    for ( int k = 0 ; k < 3 ; k++ )
        x[i][k] = y[i][k];
}
```

