

CPSC 313 2012 – Mike Feeley  
Assignment #2

Name: Matthew Park  
Student Number: 34017103

**Problem 1:**

Pseudo-code for **rmmovl**

Fetch:

icode:ifun  $\leftarrow M_1[PC]$   
rA:rB  $\leftarrow M_1[PC+1]$   
valC  $\leftarrow M_4[PC+2]$   
valP  $\leftarrow PC+6$

Decode:

valA  $\leftarrow R[rA]$   
valB  $\leftarrow R[rB]$

Execute:

valE  $\leftarrow valC + (valB * ifun)$

Memory:

$M_4[valE] \leftarrow valA$

Write back:

PC update:

$PC \leftarrow valP$

Pseudo-code for **mrmmovl**

Fetch:

icode:ifun  $\leftarrow M_1[PC]$   
rA:rB  $\leftarrow M_1[PC+1]$   
valC  $\leftarrow M_4[PC+2]$   
valP  $\leftarrow PC+6$

Decode:

valB  $\leftarrow R[rB]$

Execute:

valE  $\leftarrow valC + (valB * ifun)$

Memory:

valM  $\leftarrow M_4[valE]$

Write back:

$R[rA] \leftarrow valM$

PC update:

$PC \leftarrow valP$