COMP.2030R Lab 3 9/27/22

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1. Suppose you have an integer array A with N elements (A is global). The following function select\_sort sorts A using the selection sort algorithm. Convert the following to Pseudo-C code with (un)conditional gotos in place of the for and if statements.

void select\_sort (int N){

int i, j, min, max, tmp;

for (i = 0; i <= N/2; i++) {

min = i;

max = i;

for (j = i+1; j < N-i; j++) {

if (A[j] > A[max]) {

max = j;

continue;

}

if (A[j] < A[min]) {

min = j;

}

}

tmp = A[i];

A[i] = A[min];

A[min] = tmp;

tmp = A[N–1 - i];

A[N–1 - i] = A[max];

A[max] = tmp;

}

}

1. Convert the Pseudo-C code from part 1 into MIPS.