**MARKS AWARDED: 100**

Well done ☺

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\* CS1010 AY2011/2 Semester 2 Lab1 Ex3

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\* packing.c

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\* Finding the maximum number of slabs that can be packed into the tray

\* Loh Wan Xin

\* B02

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#include <stdio.h>

int compute\_max\_slab (int, int, int, int);

int main(void)

{

int trayLength, trayWidth, slabLength, slabWidth;

int max\_slabs;

printf("Enter dimension of tray: ");

scanf ("%d %d", &trayLength, &trayWidth);

printf("Enter dimension of slab: ");

scanf ("%d %d", &slabLength, &slabWidth);

max\_slabs = compute\_max\_slab(trayLength, trayWidth, slabLength, slabWidth);

printf("Maximum number of slabs = %d\n", max\_slabs);

return 0;

}

// Compute maximum number of slabs

int compute\_max\_slab (int tray\_length, int tray\_width, int slab\_length, int slab\_width)

{

int arrange\_vertical, arrange\_horizontal;

arrange\_vertical = (tray\_length/slab\_length)\*(tray\_width/slab\_width);

arrange\_horizontal = (tray\_length/slab\_width)\*(tray\_width/slab\_length);

if (arrange\_vertical >= arrange\_horizontal)

return arrange\_vertical;

else

return arrange\_horizontal;

}