COMP2113 Programming Technologies /

ENGG1340 Computer Programming II

**Module 6 Checkpoint Exercise**

Name: YUAN Wenxuan

University ID: 3036292740

**Instructions:**

For each single question or each group of questions in the Checkpoint exercise, please type your answer right after the question in this Word document.

**Checkpoint 6.1 (Please submit your answer to Moodle)**

There may be error(s) in the following statements. Correct the error(s) if any, if no error, please write “no error”.

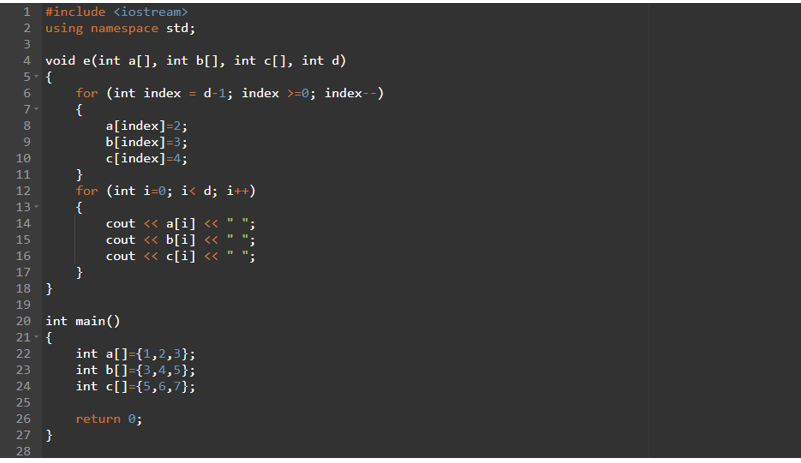
a) double a [1] [2] = {{2,3}, {3,2}}; double a[2][2] = {{2,3}, {3,2}};

b) double b [1] [2] = {{3}}; no error

c) char b[1000] = "string"; no error

**Checkpoint 6.2 (Please submit your answer to Moodle)**

Consider the following code:



a) What is the output if the above program is executed? (if no output, please write “no output”) no output

b) What is the output if e(a,b,c,3); is added to line 25? (if no output, please write “no output”) 2 3 4 2 3 4 2 3 4

c) What is the output if e(a,b,c,5); is added to line 25? (if no output, please write “no output”)

\*\*\* stack smashing detected \*\*\*: terminated

Aborted (core dumped)

**Checkpoint 6.3 (Please submit your answer to Moodle)**

Assume a 3D double array x is defined as

double x[2][2][3] = { { {3, 4, 2}, {0, -3, 9} }, { {13, 4, 56}, {5, 9, 3}}}; Write a program that would find the maximum and minimum values in this 2-by-2-by-3 double array x. Print the maximum and minimum value after they are found.

#include <iostream>

int main(void)

{

    double x[2][2][3] = {{{3, 4, 2}, {0, -3, 9}}, {{13, 4, 56}, {5, 9, 3}}};

    double max = x[0][0][0];

    double min = x[0][0][0];

    for (int i = 0; i < 2; i++)

    {

        for (int j = 0; j < 2; j++)

        {

            for (int k = 0; k < 3; k++)

            {

                max = (x[i][j][k] > max) ? x[i][j][k] : max;

                min = (x[i][j][k] < min) ? x[i][j][k] : min;

            }

        }

    }

    std::cout << max << std::endl;

    std::cout << min << std::endl;

    return 0;

}