COMP2113 Programming Technologies

ENGG1340 Computer Programming II

Module 3 Checkpoint Exercise

Name: Click or tap here to enter text.

University ID: Click or tap here to enter text.

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 3.1 (Please submit your answer to Moodle)**

What is the screen output when each of the following C++ statements is performed? Assume x = 4 and y = 6. You should write “no screen output” if no output is displayed for the statement.

1. cout << y;
2. cout << x -y;
3. cout << "y";
4. cout << "x = " << x;
5. cout << x \* y << " = " << y \* x;
6. p = x - y;
7. // cout << "x - y = " << x - y;

Ans:

1. Click or tap here to enter text.
2. Click or tap here to enter text.
3. Click or tap here to enter text.
4. Click or tap here to enter text.
5. Click or tap here to enter text.
6. Click or tap here to enter text.
7. Click or tap here to enter text.

**Checkpoint 3.2 (Please submit your answer to Moodle)**

Given the algebraic equation , which of the following are correct statements for this equation?

1. y = a \* x \* x \* x -12;
2. y = a \* x \* (x - 12);
3. y = a \* (x \* x) \* (x -12);
4. y = a \* x \* (x \* x) - 12;
5. y = a \* ( x \* x \* x ) -12;

Ans: Click or tap here to enter text.

**Checkpoint 3.3 (Please submit your answer to Moodle)**

What is the value of x after each statement is performed?

1. x = 6 + 3 \* 7 / 1 - 2;
2. x = 3 % 3 + 3 \* 2 - 2 / 2;

Ans:

1. Click or tap here to enter text.
2. Click or tap here to enter text.

**Checkpoint 3.4 (Please submit your answer to Moodle)**

If x = 5, y = 6, z = 7, evaluate each of the following statements, if possible. If it is not possible, state the reason.

1. (x + z) % y
2. (x % y) % z
3. (x \* z) % y

Ans:

1. Click or tap here to enter text.
2. Click or tap here to enter text.
3. Click or tap here to enter text.

**Checkpoint 3.5 (Please submit your answer to Moodle)**

What is printed by the following program? Suppose the input is: 20 25

#include <iostream>

using namespace std;

const int NUM = 10;

const double X = 20.5;

int main()

{

int a, b;

double p;

char grade;

a = 23;

cout << "a = " << a << endl;

cout << "Enter two integers: ";

cin >> a >> b;

cout << endl;

cout << "The numbers you entered are "

<< a << " and " << b << endl;

p = X + 2 \* a - b;

cout << "p = " << p << endl;

grade = 'B';

cout << "Your grade is " << grade << endl;

a = 2 \* NUM + p;

cout << "The value of a = " << a << endl;

return 0;

}

Ans:

**Checkpoint 3.6 - 3.9 (Please evaluate your answer on Moodle)**

Refer to corresponding Moodle pages for details.