Subject: CSC2040 Class Test 1 Feedback

Date: Tuesday, 7 November 2017 at 13:33:42 Greenwich Mean Time

From: Maire Bowler
To: Dewei Liu

## CSC2040 Data Structures and Algorithms and Programming Languages Class Test 1 Feedback Sheet

Student Name: Dewei Liu Student Number: 40216004

Part 1 Functions and parameters	Markers Comment (if any)
part_1.h contains declaration only and not definition, contains include guards	
<pre>get_min returns the smaller of three int arguments(parameters passed by value) int get_min(int i1, int i2, int i3)</pre>	
2. rotate returns the three parameters rotated (parameters passed by reference) void rotate(int& x, int& y, int& z)	
Functions tested, i.e. Called from a main function with appropriate values	

Part 2 Pointers and Arrays		Markers Comment (if any)
3.		
a.	double variable pi created and assigned the value 3.1415926	
b.	<pre>a pointer created to pi double* pi_pointer = π</pre>	
C.	<pre>pointer operations used to triple the value in pi pi =   *pi_pointer * 3; or *pi_pointer =   *pi_pointer * 3;</pre>	
d.	<pre>pi printed via the pointer cout &lt;&lt; *pi_pointer &lt;&lt; endl     Result = 9.42478</pre>	did not use the pointer to print the value of pi
4.	int* pa = *a; should be int* pa = &a	
	ut << &pa << endl <b>should be</b> cout << *pa << dl;	
5.	Missing instruction after the first for loop should be ptr = array;	
	Missing loop to calculate sum	

Part 3 Dynamic Allocation	Markers Comment (if any)

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6.
a) For example: Person p1("Jack", "Smith", "12345",
   cout << p1.get_ID_number() << endl;</pre>
b) For example: Person* p2 = new Person;
   p2->set_family_name("Jack");
   cout << p2->get_family_name() << endl;</pre>
   delete p2;
c) For example: Person* p3 = new Person[10];
        cout << p3[9].get_birth_year() << endl;</pre>
delete[] p3;
7. Instruction added as shown below
   for (int i = 0; i < 3; ++i) {
       p = getPtrToFive();
       cout << *p << endl;</pre>
       //FOLLOWING LINE ADDED
       delete p;
```

**Grade Achieved: 97.5**