Object Oriented Programming – Fall 2020

# CP Task 07 - Templates

Write a class template Point with two class parameters representing the two coordinates of the Point. Include public methods to display and set the data values as well as a function that swaps the values so that, after the swap, the first element is stored into the second and the second is stored into the first. Also write a main function that creates a Point object and calls the public methods.

**Code:**

#include <iostream>

using namespace std;

template<class T>

class Point

{

private:

T x;

T y;

public:

Point(T a,T b)

{

this->x = a;

this->y = b;

}

void Swap() {

T temp = this->x;

this->x = y;

this->y = temp;

}

void Set\_Perameter1(T a) {

this->x = a;

}

void Set\_Perameter2(T a) {

this->y = a;

}

void Display() {

cout << "Value Of 1st Perameter: " << this->x << endl;

cout << "Value Of 2nd Perameter: " << this->y << endl;

}

~Point(){}

};

int main()

{

Point<string> obj("hello","world");

obj.Set\_Perameter1("hello");

obj.Set\_Perameter2("world");

obj.Swap();

obj.Display();

cout << endl;

Point<double> obj1(45.567,32.2642);

obj1.Swap();

obj1.Display();

system("pause");

return 0;

}

Copy and paste all your code in this word file and submit it.