**University of Michigan – Dearborn**

**Department of Computer and Information Science**

**CIS 150L – Fall 2014**

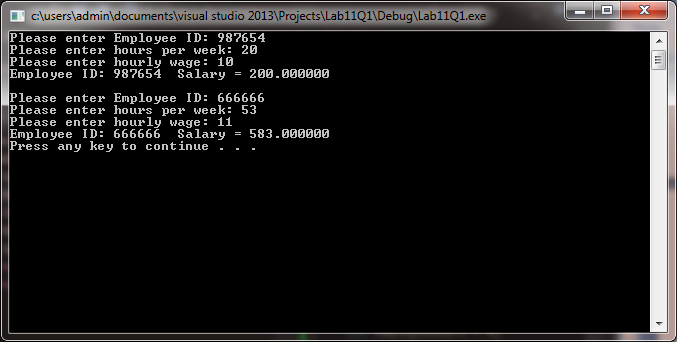
Lab 11

Srinivas Simhan

11/30/14

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3. **Question 1**
   1. **Screenshot**



* 1. **Source Code**

**Header**

// Purpose: Define Hourly Employee Class

// Author: Srinivas Simhan

// Date Created: 11/24/2014

// Date Last Modified: 11/24/2014

#ifndef HOURLYEMPLOYEE\_H // avoid multile definitions

#define HOURLYEMPLOYEE\_H // not part of the class

#include <string>

class HourlyEmployee

{

public:

void setId(std::string);

void setHours(int);

void setWage(float);

std::string getWeeklySalary();

private:

std::string id; //employee id

int hours; //work hours in a week

float wage; //wage per hour

};

#endif // HOURLYEMPLOYEE\_H

**Implementation**

// Purpose: Hourly Employee Class Implementation

// Author: Srinivas Simhan

// Date Created: 11/24/2014

// Date Last Modified: 11/24/2014

#include "Lab11Q1.h"

#include <iostream>

#include <string>

using namespace std;

// Set ID value

void HourlyEmployee::setId(string employeeID)

{

id = employeeID;

};

// Set Hours value

void HourlyEmployee::setHours(int employeeHours)

{

hours = employeeHours;

}

// Set Wage value

void HourlyEmployee::setWage(float employeeWage)

{

wage = employeeWage;

}

// Get weekly salary

string HourlyEmployee::getWeeklySalary()

{

return "Employee ID: " + id + " Salary = " + to\_string(hours \* wage); // salary = hours \* wage per hour

};

**Main**

// Purpose: Using Classes to find Salary

// Author: Srinivas Simhan

// Date Created: 11/24/2014

// Date Last Modifed: 11/24/2014

#include "Lab11Q1.h"

#include <iostream>

#include <string>

using namespace std;

int main()

{

HourlyEmployee Employee\_1;

HourlyEmployee Employee\_2;

string employeeId = "";

int employeeHours = 0;

float employeeWage = 0;

// 1st Employee

cout << "Please enter Employee ID: ";

cin >> employeeId;

Employee\_1.setId(employeeId);

cout << "Please enter hours per week: ";

cin >> employeeHours;

Employee\_1.setHours(employeeHours);

cout << "Please enter hourly wage: ";

cin >> employeeWage;

Employee\_1.setWage(employeeWage);

cout << Employee\_1.getWeeklySalary() << endl << endl;

// 2nd Employee

cout << "Please enter Employee ID: ";

cin >> employeeId;

Employee\_2.setId(employeeId);

cout << "Please enter hours per week: ";

cin >> employeeHours;

Employee\_2.setHours(employeeHours);

cout << "Please enter hourly wage: ";

cin >> employeeWage;

Employee\_2.setWage(employeeWage);

cout << Employee\_2.getWeeklySalary() << endl;

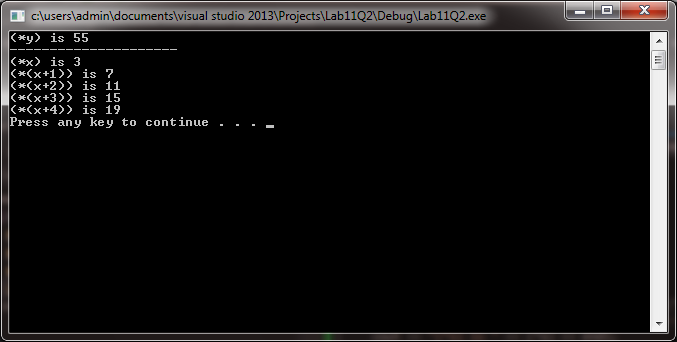
system("pause");

return 0;

}

1. **Question 2**

**2.1 Screenshot**



**2.2. Source Code**

// Purpose: Display Array Numbers

// Author: Srinivas Simhan

// Date Created: 11/24/14

// Date Modified: 11/24/14

#include <iostream>

#include <string>

using namespace std;

int main()

{

int \*x, \*y;

x = new int[5];

y = new int;

(\*x) = 3;

(\*(x + 1)) = 7;

(\*(x + 2)) = 11;

(\*(x + 3)) = 15;

(\*(x + 4)) = 19;

(\*(y)) = (\*x) + (\*(x + 1)) + (\*(x + 2)) + (\*(x + 3)) + (\*(x + 4));

cout << "(\*y) is " << (\*y) << endl << "---------------------" << endl;

cout << "(\*x) is " << (\*x) << endl;

cout << "(\*(x+1)) is " << (\*(x + 1)) << endl;

cout << "(\*(x+2)) is " << (\*(x + 2)) << endl;

cout << "(\*(x+3)) is " << (\*(x + 3)) << endl;

cout << "(\*(x+4)) is " << (\*(x + 4)) << endl;

system("pause");

return 0;

}