Lab 2

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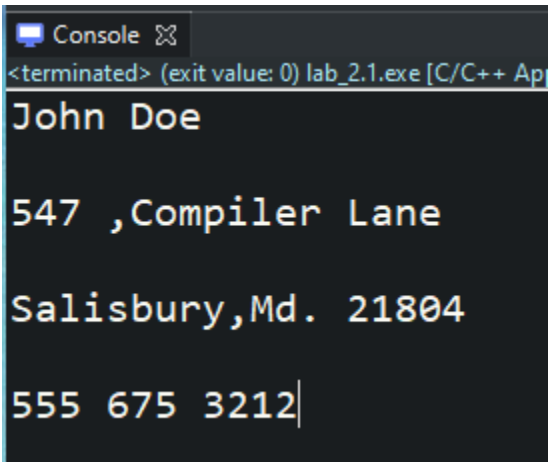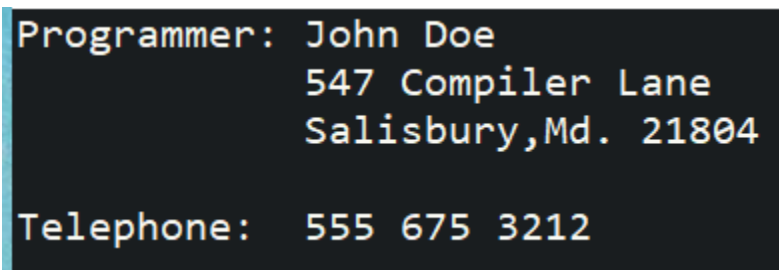<p align="center">Lab 2</p>

2.1

Ex 1

Ex 2

Ex 3

#include <iostream>

```cpp
using namespace std;

int main()

{

        cout << "Programmer: John Doe" << endl;

        cout << "            547 Compiler Lane" << endl;

        cout << "         Salisbury,Md. 21804\n" << endl;

        cout << "Telephone:  555 675 3212" << endl;


        return 0;

}
```

Lab 2.2

Ex1 :


```
<terminated> (exit value: 0) lab_2.2.exe [C/C++ Application] D:\Documents\eclipse workspace\lab
The Circumference of the circle is 33.912
The Area of the circle is 91.5624
```

EX 2

```cpp
// This program will output the circumference and area// of the circle with a given radius.// PLACE

YOUR NAME HERE

#include <iostream>

using namespace std;


const double PI = 3.14;

const double RADIUS = 5.4;


int main() {
```

float area;

// definition of area of circle

Float circumference;

// definition of circumference

circumference = 2 * PI * RADIUS;

// computes circumference

area = PI * (RADIUS * RADIUS); // computes area

// Fill in the code for the <u>cout</u> statement that will output (with description)

cout << "The Circumference of the circle is " << circumference << endl;

// the circumference// Fill in the code for the <u>cout</u> statement that will output (with description)

cout << "The Area of the circle is " << area << endl;
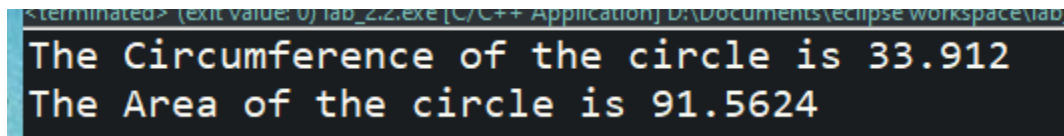
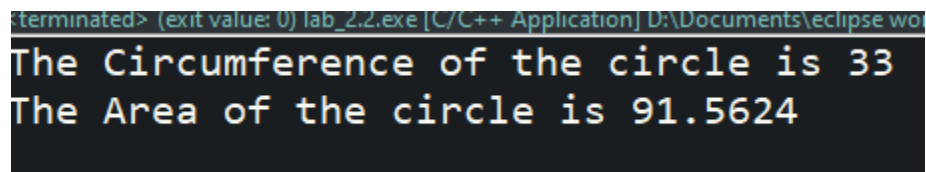// the area of the circle

return 0;

}

Ex3:


```
terminated> (exit value: 0) lab_2.2.exe [C/C++ Application] D:\Documents\eclipse wor
The Circumference of the circle is 33
The Area of the circle is 91.5624
```

Lab 2.3

Ex1

// This program will output the circumference and area// of the circle with a given radius.// PLACE

YOUR NAME HERE

#include <iostream>

using namespace std;

```cpp
const double length = 8;

const double width = 3;


int main() {

        float area;

        // definition of area of rectangle

        float perimeter;

        // definition of perimeter

        perimeter = (2 *length)+ (2*width);

        // computes circumference

        area = length*width; // computes area

        // Fill in the code for the cout statement that will output (with description)

        cout << "The Perimeter of the rectangle is " << perimeter << endl;

        // the circumference// Fill in the code for the cout statement that will output (with description)

        cout << "The Area of the rectangle is " << area << endl;

        // the area of the rectangle

        return 0;

}
```
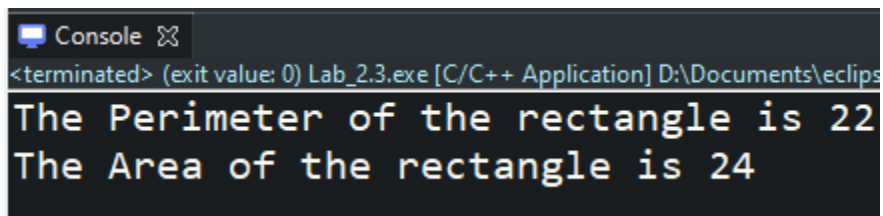
Ex 2

Lab 2.4

Ex1

```
The preferred soda is Dr. Dolittle
The preferred snack is crackers
Out of 250 people
148 chose these items!
Each of these products were given a rating of B
from our expert tasters
The other products were rated no higher than a B
```

Ex2

// This program demonstrates the use of characters and strings

// PLACE YOUR NAME HERE

#include <iostream>

#include <string>

using namespace std;

// Definition of constants

const string FAVORITESODA = "Dr. Dolittle"; // use double quotes for strings

const char BESTRATING = 'A';   // use single quotes for characters

int main() {

       char rating = 'B';   // 2nd highest product rating

       string favoriteSnack = "crackers";   // most preferred snack

       int numberOfPeople = 250;   // the number of people in the survey

       int topChoiceTotal = 148;// the number of people who prefer the top choice

// Fill in the code to do the following:

// Assign the value of "crackers" to favoriteSnack

// Assign a grade of 'B' to rating

// Assign the number 250 to the numberOfPeople

// Assign the number 148 to the topChoiceTotal

// Fill in the blanks of the following:

cout << "The preferred soda is " << FAVORITESODA << endl;

cout << "The preferred snack is " << favoriteSnack << endl;

cout << "Out of " << numberOfPeople << " people " << endl;

cout << topChoiceTotal << " chose these items!" << endl;

cout << "Each of these products were given a rating of " << rating << endl;

cout << "from our expert tasters" << endl;

cout << "The other products were rated no higher than a " << rating << endl;

return 0;

}

Ex3:

No, because it is a constant and cannot be changed during execution

Ex4:

Yes, because it is not a constant therefore it can be changed during execution