Branches

Assignment 1: Counting Odd Numbers

Write a program that takes in four positive integers and outputs the number of odd numbers. (Hint: use the modulo operator to determine if a number is odd)

Ex: If the input is:

In [ ]:
```
1 2 3 4
```

the output is:

In [ ]:
```
2
```

Ex: If the input is:

In [ ]:
```
19 18 17 15
```

the output is:

In [ ]:
```
3
```

main.cpp

```
#include <iostream>
using namespace std;

int main() {

   /* Type your code here. */

   return 0;
}
```

Assignment 1 Tests

Apply and report the results of these 5 tests for a total of 10 points.

1. Compare output (2 points)

When input is

```
2 4 6 9
```

Standard output exactly matches

```
1
```

2. Compare output (2 points)

When input is

```
2 21 6 9
```

Standard output exactly matches

```
2
```

3. Compare output (2 points)

When input is

```
7 21 6 9
```

Standard output exactly matches

```
3
```

4. Compare output (2 points)

When input is

```
7 21 123 9
```

Standard output exactly matches

```
4
```

5. Compare output (2 points)

When input is

```
20 200 2000 2
```

Standard output exactly matches

```
0
```

Assignment 2: Phone number string breakdown

Given a string representing a 10-digit phone number, output the area code, prefix, and line number using the format (800) 555-1212.

Ex: If the input is:

In [ ]:
```
8005551212
```

the output is:

In [ ]:
```
(800) 555-1212
```

Hint: Use library string. Define area code, prefix number, and line number strings. Use method substr to break your string into substrings.

For simplicity, assume all phone numbers are 10-digit. So 18005551212 is not allowed.

main.cpp

```
#include <iostream>
#include <string>

using namespace std;

int main() {
   string phoneNumber;

   cin >> phoneNumber;

   /* Type your code here */

   return 0;
}
```

Assignment 2 Tests

Apply and report the results of these 5 tests for a total of 10 points.

1. Compare output (2 points)

When the input is

In [ ]:
```
3134524789
```

The output is

In [ ]:
```
(313) 452-4789
```

2. Compare output (2 points)

When the input is

In [ ]:
```
6818524564
```

The output is

In [ ]:
```
(681) 852-4564
```

3. Compare output (2 points)

When the input is

In [ ]:
```
8007539514
```

The output is

In [ ]:
```
(800) 753-9514
```

4. Compare output (2 points)

When the input is

In [ ]:
```
8009634561
```

The output is

In [ ]:
```
(800) 963-4561
```

5. Compare output (2 points)

When the input is

In [ ]:
```
2489518473
```

The output is

In [ ]:
```
(248) 951-8473
```

Submissions

Note: Do not forget to submit both assignments to receive full credit.

1 - Name your C++ files FirstName_LastName_Assignment1.cpp and FirstName_Lastname_Assignment2.cpp

2 - Prepare your report in docx or pdf format and name it Firstname_Lastname.docx or Firstname_Lastname.pdf. Put both your assignments and corresponding tests in ONE report file.

3 - Add the screenshot of your code to the report. All five tests should be performed and the result screenshot be included in the report.

Note: Make sure to have your report containing both explanatnations and screenshots.