HW02 Testcase

1. WordCounter [50pt]

- 채점 기준**:** 기본 점수 **10pt,** 아래 **expected ouput**을 **line by line**으로 비교했을 때 맞으면 **+1pt**

[test1]
“Mrs. Dursley was thin and blonde and had nearly twice the usual amount of neck, which came in very useful as she spent so much of her time craning over garden fences, spying on the neighbors.”

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "Mrs. Dursley was thin and blonde and had nearly twice the usual amount of neck, which came in very useful as she spent so much of her time craning over garden fences, spying on the neighbors.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("and") << " times" << endl;

   return 0;
}
```

Word Count: 36
Character Count: 152
Number of Unique Words: 33
The word and appears 2 times

[test2]
"hello world, Hello World."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;
```

```
int main() {
    string text = "hello world, Hello World.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("world") << "
times" << endl;

   return 0;
}
```

Word Count: 4
Character Count: 20
Number of Unique Words: 4
The word and appears 1 times

[test3]

“She, she. sheeee, shesheshe. She is SHEshe she, she.”

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "She, she. sheeee, shesheshe. She is SHEshe she, she.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("She") << "
times" << endl;

   return 0;
}
```

Word Count: 9
Character Count: 38
Number of Unique Words: 6
The word and appears 2 times

[test4]
"apple banana cherry durian apple cherry elderberry berry strawberry cherry berry."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "apple banana cherry durian apple cherry elderberry berry strawberry cherry berry.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("berry") << " times" << endl;

   return 0;
}
```

Word Count: 11
Character Count: 70
Number of Unique Words: 7
The word and appears 2 times

[test5]
"aaaaaaaaaaa, aaaabaaanaa, a, aa, aaaaaaaaaaa,
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "aaaaaaaaaaa, aaaabaaanaa, a, aa, aaaaaaaaaaa, aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
```

```
    cout << "Character Count: " << counter.GetCharacterCount() << endl;
    cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
    cout << "The word and appears " << counter.GetWordCount_OneWord("a") << " times"
<< endl;

    return 0;
}
```

Word Count: 6
Character Count: 68
Number of Unique Words: 6
The word and appears 1 times

[test6]
"The quick brown fox jumps over the lazy dog. The lazy dog sleeps all day."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "The quick brown fox jumps over the lazy dog. The lazy dog sleeps all
day.";
    WordCounter counter;
    counter.InputText(text);

    cout << "Word Count: " << counter.GetWordCount() << endl;
    cout << "Character Count: " << counter.GetCharacterCount() << endl;
    cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
    cout << "The word and appears " << counter.GetWordCount_OneWord("the") << "
times" << endl;

    return 0;
}
```

Word Count: 15
Character Count: 57
Number of Unique Words: 12
The word and appears 1 times

[test7]
"thisisaverylongword."

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

```
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "thisisaverylongword.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("is") << "
times" << endl;

   return 0;
}
```

Word Count: 1
Character Count: 19
Number of Unique Words: 1
The word and appears 0 times

[test8]
"A penny saved is a penny earned."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "A penny saved is a penny earned.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("penny") << "
times" << endl;

   return 0;
}
```

Word Count: 7
Character Count: 25

Number of Unique Words: 6
The word and appears 2 times

[test9]
"I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character.";
   WordCounter counter;
   counter.InputText(text);

   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("a") << " times" << endl;

   return 0;
}
```

Word Count: 35
Character Count: 134
Number of Unique Words: 29
The word and appears 2 times

[test10]
"The cat in the cathat, Cat, catcat, cat."

```
#include <iostream>
#include <string>
#include "WordCounter.h"
using namespace std;

int main() {
    string text = "The cat in the cathat, Cat, catcat, cat.";
   WordCounter counter;
   counter.InputText(text);
```

```
   cout << "Word Count: " << counter.GetWordCount() << endl;
   cout << "Character Count: " << counter.GetCharacterCount() << endl;
   cout << "Number of Unique Words: " << counter.GetUniqueWordCount() << endl;
   cout << "The word and appears " << counter.GetWordCount_OneWord("cat") << "
times" << endl;

   return 0;
}
```

Word Count: 8
Character Count: 29
Number of Unique Words: 7
The word and appears 2 times

2. Electronics [50pt]

- 채점 기준**:** 아래 세 개 테스트 케이스 모두 통과해야 **50pt, otherwise 0pt**
- 띄어쓰기**,** 오타**,** 스펠링 등 하나라도 틀리게 출력하면 **0pt(**부분 점수 없음**)**

[test1]

```
#include <stdio.h>
#include <stdlib.h>
#include "Electronics.h"

int main() {
 Electronics* e1 = new TV(500);
 Electronics* e2 = new Cellphone(180);
 Laptop * e3 = new Laptop(390);

  e1->PrintSelf();
 e2->PrintSelf();
 e3->PrintSelf();

 delete e1;
 delete e2;
 delete e3;

 return EXIT_SUCCESS;
}
```

It is a TV, Size=500, Price=900
It is a Cellphone, Size=180, Price=126
It is a Laptop with 0 GPU(s), Size=390, Price=234, Total Price=234

[test2]

```
#include <stdio.h>
#include <stdlib.h>
#include "Electronics.h"

int main() {
 Electronics* e1 = new TV(710);
 Electronics* e2 = new Cellphone(110);
 Laptop * e3 = new Laptop(360);

 Computer * GPU1 = new Computer(70);

  e3->AddGPU(GPU1);

  e1->PrintSelf();
 e2->PrintSelf();
 e3->PrintSelf();

 delete e1;
 delete e2;
 delete e3;
 delete GPU1;

 return EXIT_SUCCESS;
}
```

It is a TV, Size=710, Price=1278
It is a Cellphone, Size=110, Price=77
It is a Laptop with 1 GPU(s), Size=360, Price=432, Total Price=474

[test3]

```
#include <stdio.h>
#include <stdlib.h>
#include "Electronics.h"

int main() {
 Electronics* e1 = new TV(560);
 Electronics* e2 = new Cellphone(200);
 Laptop * e3 = new Laptop(230);

 Computer * GPU1 = new Computer(10);
 Computer * GPU2 = new Computer(80);
```

```
 e3->AddGPU(GPU1);
e3->AddGPU(GPU2);

 e1->PrintSelf();
e2->PrintSelf();
e3->PrintSelf();

delete e1;
delete e2;
delete e3;
delete GPU1;
delete GPU2;

return EXIT_SUCCESS;
}
```

```
It is a TV, Size=560, Price=1008
It is a Cellphone, Size=200, Price=140
It is a Laptop with 2 GPU(s), Size=230, Price=276, Total Price=330
```