LAB 0: Basic Exercise

***주의: program내에 "이름, 학번, 프로그램ID(ex. Lab1)등 반드시 쓸 것.**

Lab0-1: Find Min and Max numbers

1) Data file: 10개의 정수로 구성한다. (예: 90, 40, 60, 10, 50, 80, 20, 70, 15, 25) Lab0-1.dat

2) Output: Minimum number is 10 at position 4,
Maximum number is 90 at position 1

/* 다음 코드 참조

```
int findMin(int data[], int n) {
        int min = data[0];
        for (int i = 1; i < n; i++)
              if (data[i] < min)
                    min = data[i];
        return min;
}
```

Lab0-2: File I/O 연습

다음 데이터 파일에서 한 line씩 읽고 각 Line의 단어 개수를 출력하는 프로그램을 작성하시오

예) [Data File] 다음 데이터 파일 이름을 "lab0-2.dat"로 저장.

A program that translates a high level language to a machine language
is called a compiler. A compiler is thus a somewhat peculiar sort
of program and its output is yet another program. To avoid confusion,
the input program is usually called the source program or
source code, and the translated version produced by the compiler is called

[출력] 실행했을 경우, 다음과 같은 결과를 출력한다. /*
다음은 실행 결과임

```
A program that translates a high level language to a machine language
The number of words : 12
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The number of words : 12
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The number of words : 10
source code, and the translated version produced by the compiler is called
The number of words : 12
```

Total Number of Words: 58

* 참조: Word Count알고리즘

```
While (buffer is not empty)) {
   Print One Line;
   WordCount (buffer, WC);
   Print Count (WC)
 }
 Print TotalWordCount;

WordCount(buffer, WC)
//Initialize pointer IN=1, OUT=0;   //단어가 시작되면 state= IN이 됨
 int i = 0;   int state = OUT;          // 단어가 시작되지 않음

while (buffer[i] != '\0')   { //Until End of Line
 if (isalpha(buffer[i])) {
      if (state == OUT) { ++wc; state = IN;
         }                        //문자 이고 state=IN이면 do nothing
 else if (buffer[i] == ' ')
      state = OUT;
 i++;
}
```