

# Programming Project personal project #2: Extended Word Finder

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# Personal project #2: Extended Word Finder

- **Project 개발 대상**

- 개인프로젝트#1 (word finder) 의 기능 확장

- **목적**

- 수업에서 배운 내용을 바탕으로 프로젝트를 수행할 수 있는가

- **평가**

- 요구 사항에 맞게 기능을 구현하였는가

# Personal project #2: Extended Word Finder

- **Input**

- Sample file : text file
- 입력 받은 command 에 따라 요구사항에 만족하는 기능을 정확하게 수행

- **Function & Output**

- 메뉴를 출력하고 command 를 입력 받아 해당 기능을 수행
  - 1. Search word (in text file)
  - 2. Display all word (in 1's result)
  - 3. Display alphabet word(in 1's result)
  - 4. Quit
- 각 기능의 결과는 프로그램 기능 설명과 실행 예시 참조

# Personal project #2: Extended Word Finder

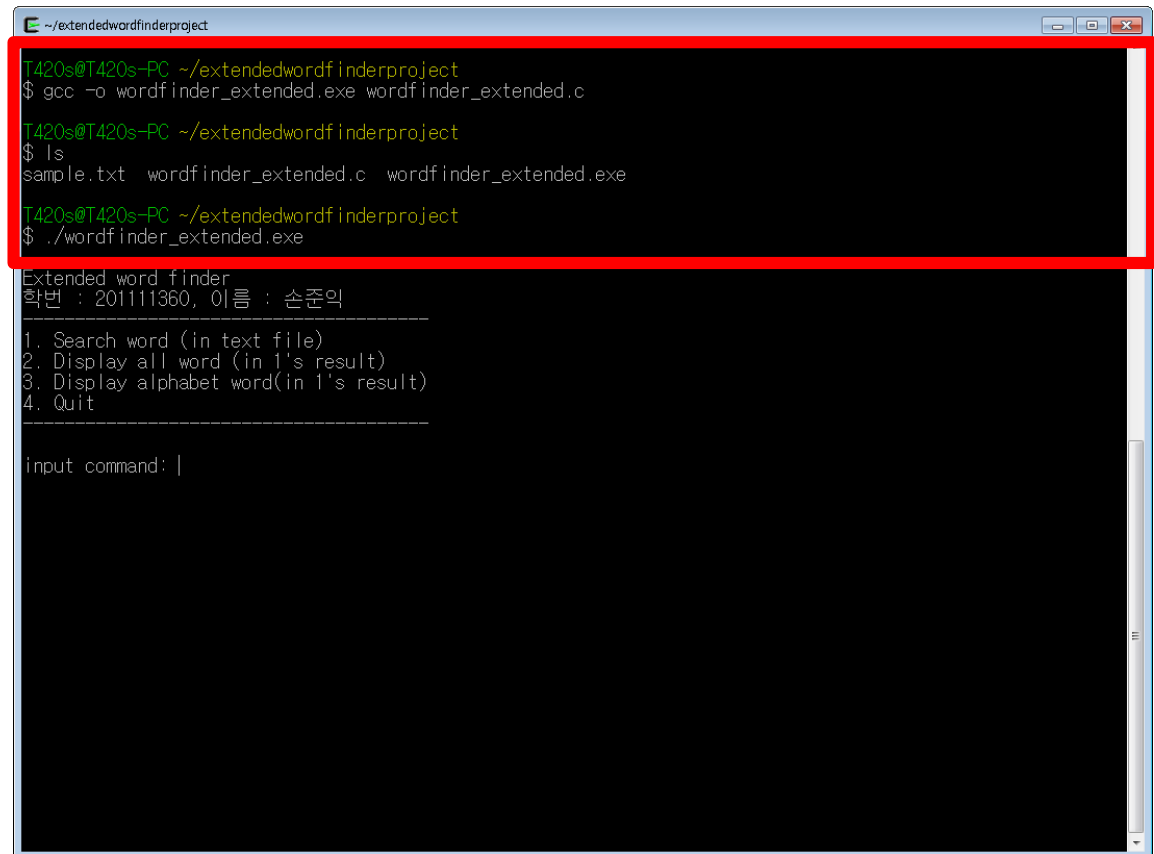
- **주의 사항**

- Cygwin 환경에서 컴파일하여 실행 파일을 만들 것
  - 다른 환경에서 컴파일하여 만든 실행파일을 제출하여 실행이 안될 경우 '0점' 처리
- 코드파일과 실행파일 이름은 “wordfinder\_extended”로 명명할 것.
  - 코드파일: wordfinder\_extended.c
  - 실행파일: wordfinder\_extended.exe
- Sample text file은 프로그램이 실행되는 디렉토리와 같은 위치에 존재하며, 프로그램 실행 시 별도의 조작없이 자동으로 읽어 수행할 수 있도록 할 것
  - Sample text file 이름은 “sample.txt”로 명명
    - 과제는 sample.txt 파일로 평가할 예정.
- 실행 시 첫 화면에 “학번\_이름”이 출력되도록 할 것

# Personal project #2: Extended Word Finder

- 프로젝트 상세 사항

- 코드 파일 이름: “wordfinder\_extended.c”
- 실행 파일 이름: “wordfinder\_extended.exe”



```
~/extendedwordfinderproject
T420s@T420s-PC ~/extendedwordfinderproject
$ gcc -o wordfinder_extended.exe wordfinder_extended.c

T420s@T420s-PC ~/extendedwordfinderproject
$ ls
sample.txt wordfinder_extended.c wordfinder_extended.exe

T420s@T420s-PC ~/extendedwordfinderproject
$ ./wordfinder_extended.exe

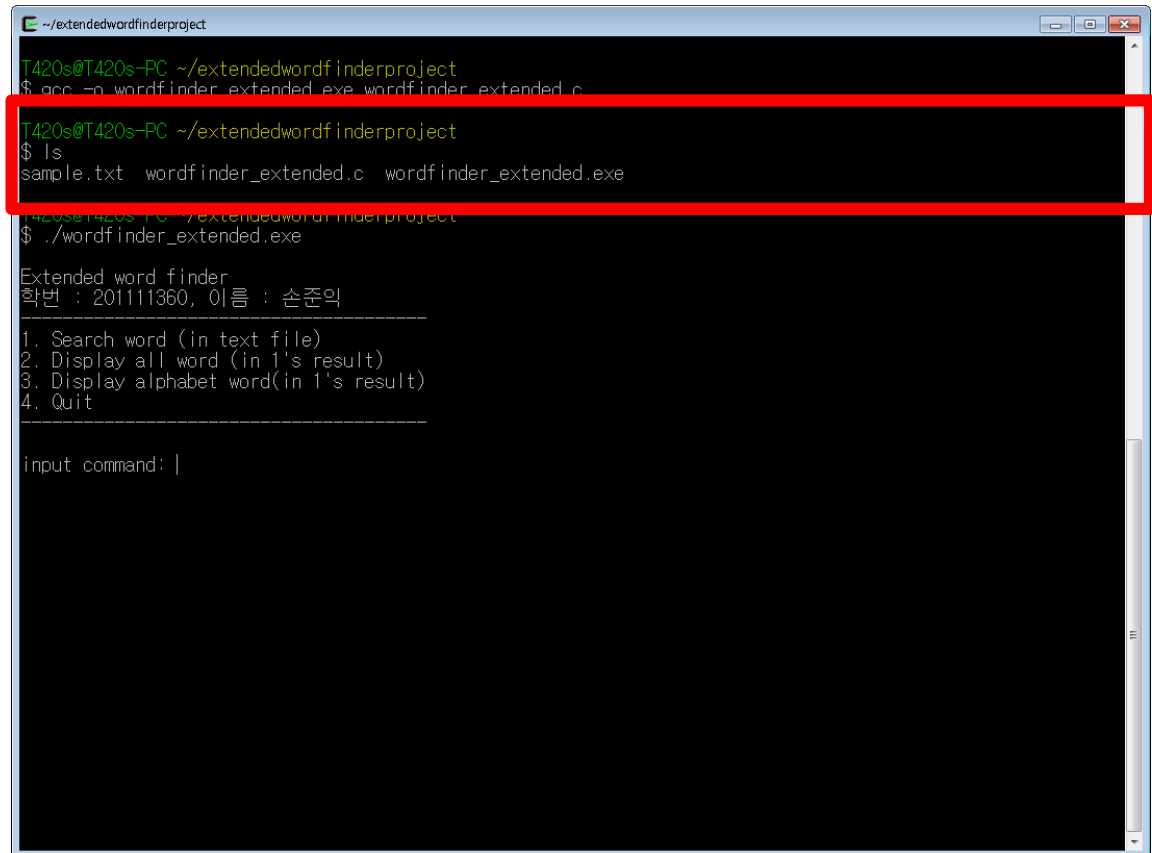
Extended word finder
학번 : 201111360, 이름 : 손준익
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: |
```

# Personal project #2: Extended Word Finder

- 프로젝트 상세 사항

- 검색 대상 text file 은 같은 디렉토리 내의 sample.txt file



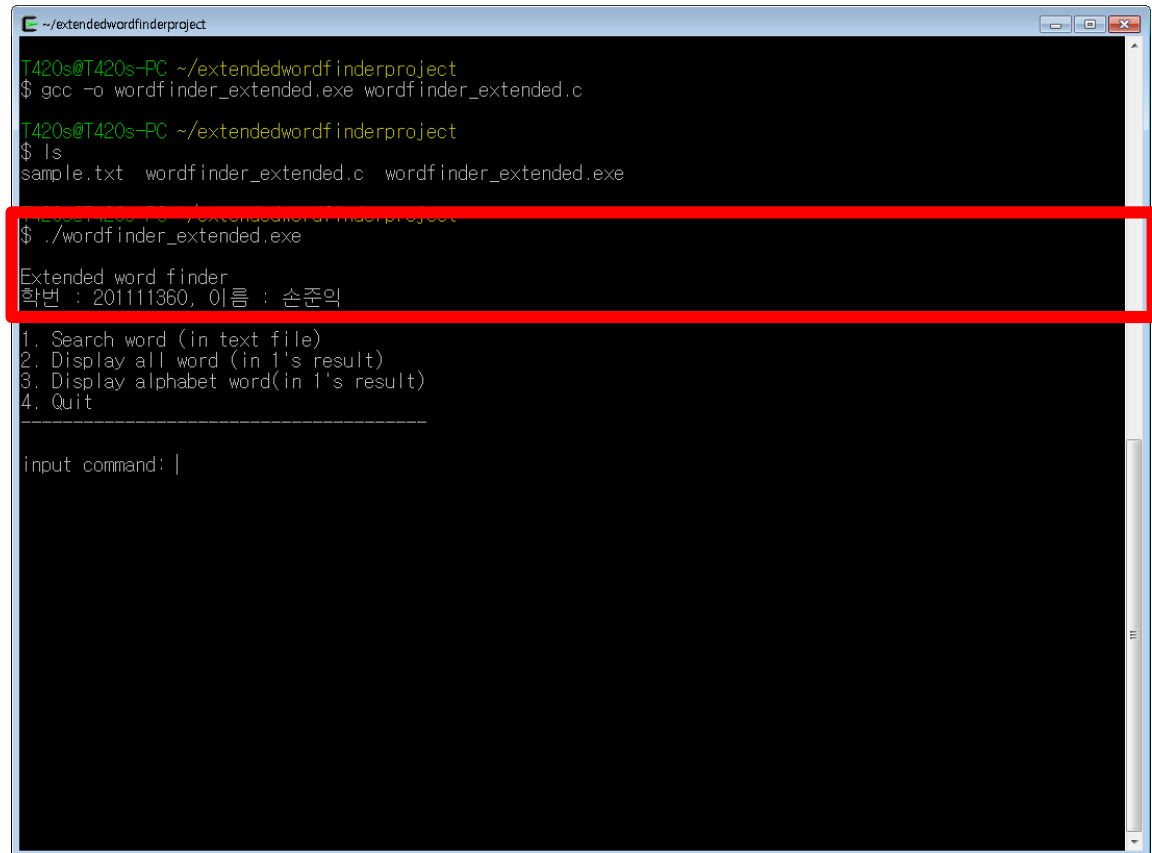
```
~/extendedwordfinderproject
T420s@T420s-PC ~/extendedwordfinderproject
$ gcc -o wordfinder_extended.exe wordfinder_extended.c
T420s@T420s-PC ~/extendedwordfinderproject
$ ls
sample.txt wordfinder_extended.c wordfinder_extended.exe
T420s@T420s-PC ~/extendedwordfinderproject
$ ./wordfinder_extended.exe

Extended word finder
학번 : 201111360, 이름 : 손준익
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: |
```

# Personal project #2: Extended Word Finder

- 프로그램 상세 사항

- 첫 실행 시 “학번\_이름”을 출력하도록 할 것



```
~/extendedwordfinderproject
T420s@T420s-PC ~/extendedwordfinderproject
$ gcc -o wordfinder_extended.exe wordfinder_extended.c

T420s@T420s-PC ~/extendedwordfinderproject
$ ls
sample.txt wordfinder_extended.c wordfinder_extended.exe

T420s@T420s-PC ~/extendedwordfinderproject
$ ./wordfinder_extended.exe

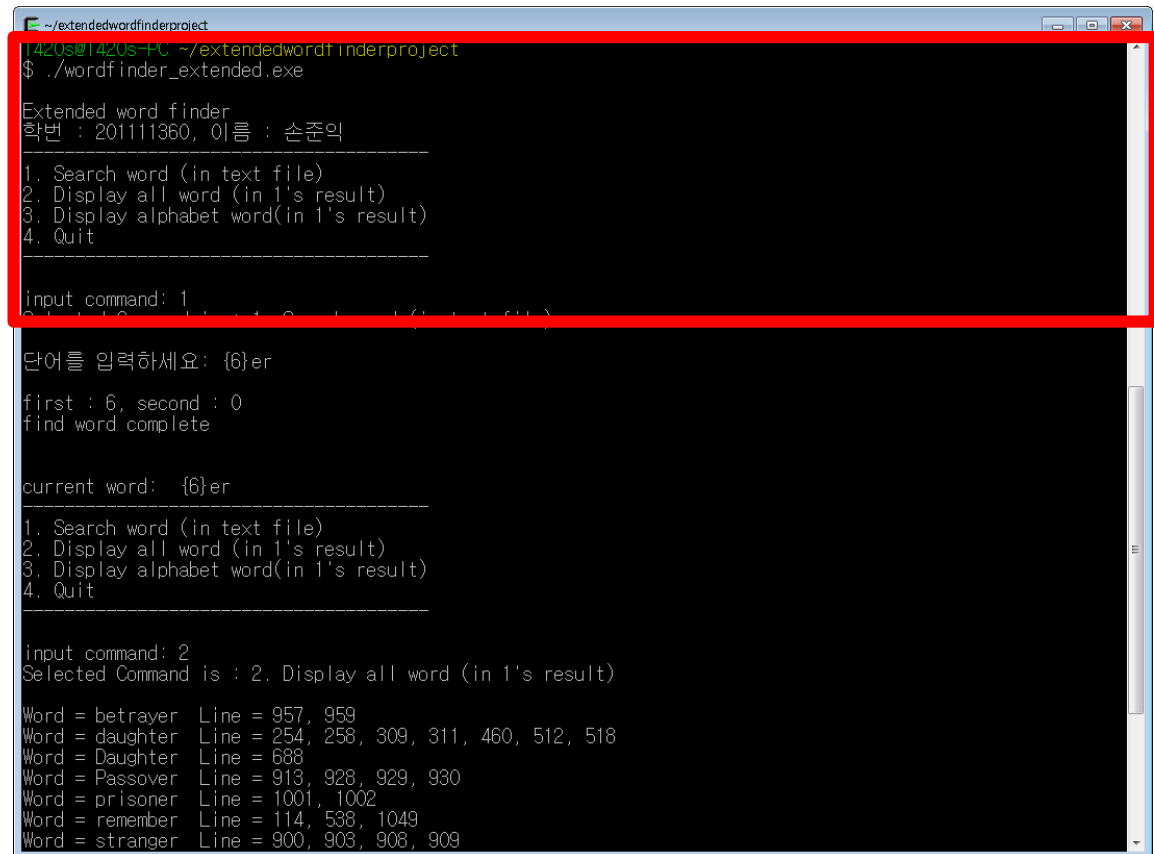
Extended word finder
학번 : 201111360, 이름 : 손준익

1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: |
```

# Personal project #2: Extended Word Finder

- 프로그램 상세 사항

- 프로그램 실행 시 input (command) 을 받아서 기능을 실행



```
~/extendedwordfinderproject
1420s@1420s-PC ~/extendedwordfinderproject
$ ./wordfinder_extended.exe
Extended word finder
학번 : 201111360, 이름 : 손준익
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 1
Selected Command is : 1. Search word (in text file)
단어를 입력하세요: {6}er
first : 6, second : 0
find word complete

current word: {6}er
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 2
Selected Command is : 2. Display all word (in 1's result)
Word = betrayer Line = 957, 959
Word = daughter Line = 254, 258, 309, 311, 460, 512, 518
Word = Daughter Line = 688
Word = Passover Line = 913, 928, 929, 930
Word = prisoner Line = 1001, 1002
Word = remember Line = 114, 538, 1049
Word = stranger Line = 900, 903, 908, 909
```



# Personal project #2: Extended Word Finder

- 프로그램 기능

- 메뉴는 4개로 구성 1~4

```
~/extendedwordfinderproject
1420s@1420s-PC ~/extendedwordfinderproject
$ ./wordfinder_extended.exe

Extended word finder
학번 : 201111360, 이름 : 손준익
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 1
Selected Command is : 1. Search word (in text file)

단어를 입력하세요: {6}er

first : 6, second : 0
find word complete

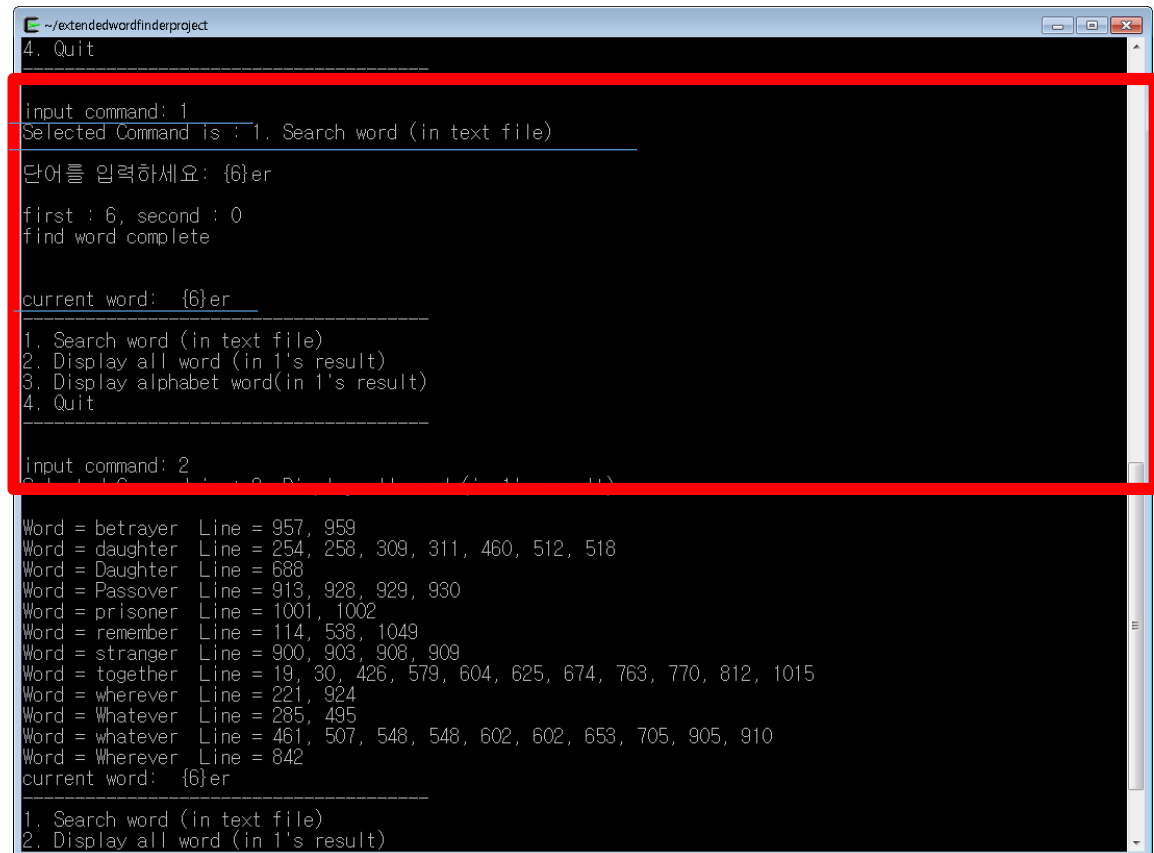
current word: {6}er
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 2
Selected Command is : 2. Display all word (in 1's result)

Word = betrayer Line = 957, 959
Word = daughter Line = 254, 258, 309, 311, 460, 512, 518
Word = Daughter Line = 688
Word = Passover Line = 913, 928, 929, 930
Word = prisoner Line = 1001, 1002
Word = remember Line = 114, 538, 1049
Word = stranger Line = 900, 903, 908, 909
```

# Personal project #2: Extended Word Finder

- **프로그램 기능: 1. search word (in text file)**

- 개인 프로젝트 #1 의 결과를 가지도록 수행
- 단어 검색이 끝나면, 다시 메인 메뉴 출력



```
~/extendedwordfinderproject
4. Quit
-----
input command: 1
Selected Command is : 1. Search word (in text file)
단어를 입력하세요: {6}er
first : 6, second : 0
find word complete

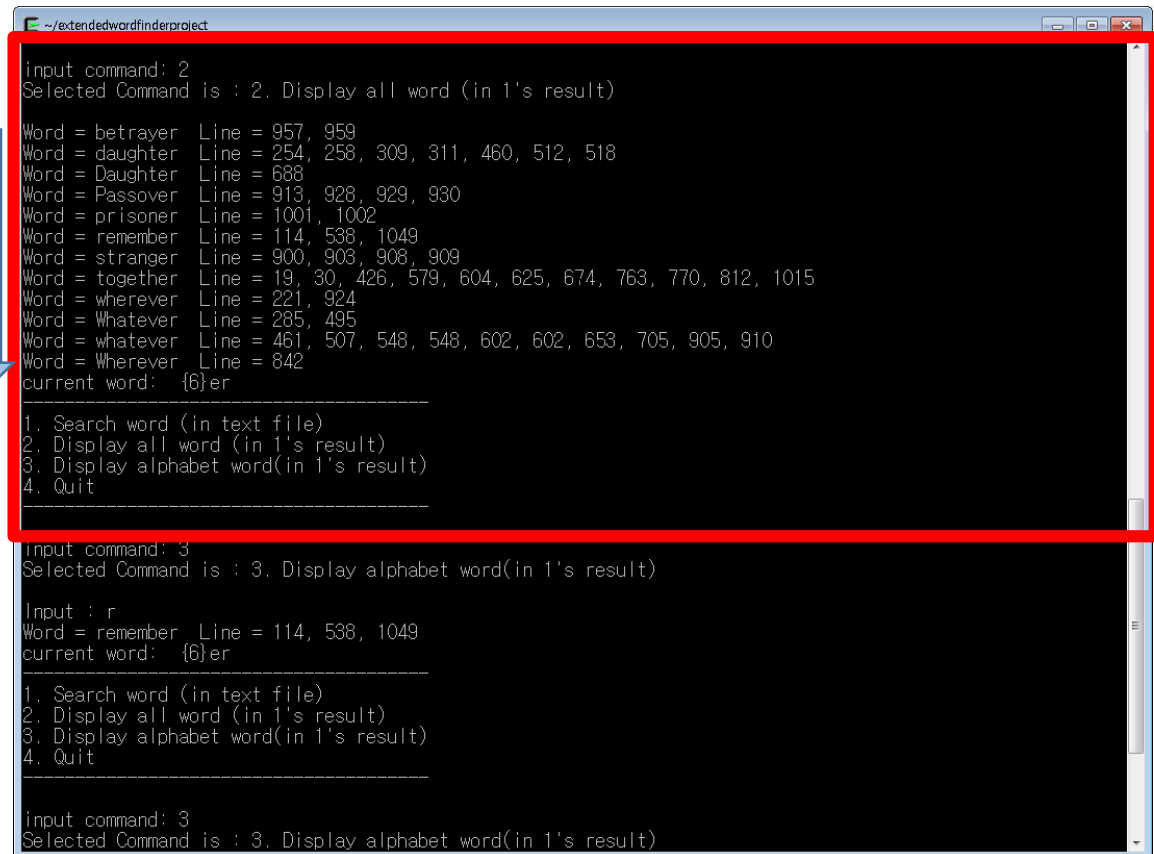
current word: {6}er
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 2
Selected Command is : 2. Display all word (in 1's result)
Word = betrayer Line = 957, 959
Word = daughter Line = 254, 258, 309, 311, 460, 512, 518
Word = Daughter Line = 688
Word = Passover Line = 913, 928, 929, 930
Word = prisoner Line = 1001, 1002
Word = remember Line = 114, 538, 1049
Word = stranger Line = 900, 903, 908, 909
Word = together Line = 19, 30, 426, 579, 604, 625, 674, 763, 770, 812, 1015
Word = wherever Line = 221, 924
Word = Whatever Line = 285, 495
Word = whatever Line = 461, 507, 548, 548, 602, 602, 653, 705, 905, 910
Word = Wherever Line = 842
current word: {6}er
-----
1. Search word (in text file)
2. Display all word (in 1's result)
```

# Personal project #2: Extended Word Finder

- **프로그램 기능: 2. Display all word (in 1's result)**

- Command 1의 결과를 출력: word & line
- 출력 후 메인 메뉴 출력

- 기능의 상세 설명.
  1. 알파벳 순으로 정렬하여 출력
  2. 중복단어의 경우 중복된 단어가 존재하는 위치 (text file의 line num) 출력
- 대소문자 구분할 것.
- Whatever / whatever 구분함



```
~/extendedwordfinderproject
input command: 2
Selected Command is : 2. Display all word (in 1's result)

Word = betrayer Line = 957, 959
Word = daughter Line = 254, 258, 309, 311, 460, 512, 518
Word = Daughter Line = 688
Word = Passover Line = 913, 928, 929, 930
Word = prisoner Line = 1001, 1002
Word = remember Line = 114, 538, 1049
Word = stranger Line = 900, 908, 908, 909
Word = together Line = 19, 30, 426, 579, 604, 625, 674, 763, 770, 812, 1015
Word = wherever Line = 221, 924
Word = Whatever Line = 285, 495
Word = whatever Line = 461, 507, 548, 548, 602, 602, 653, 705, 905, 910
Word = Wherever Line = 842
current word: {6}er

-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)

Input : r
Word = remember Line = 114, 538, 1049
current word: {6}er

-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)
```

# Personal project #2: Extended Word Finder

- **프로그램 기능: 3. Display alphabet word (in 1's result)**

- 1의 결과 중 입력한 알파벳으로 시작하는 단어를 출력
- 3 기능의 결과 출력 후 메인 메뉴 출력

```
input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)

Input : s
Word = stranger Line = 900, 903, 908, 909
current word: {s}

-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)

Input : w
Word = wherever Line = 221, 924
Word = whatever Line = 285, 495
Word = whatever Line = 461, 507, 548, 548, 602, 602, 653, 705, 905, 910
Word = Wherever Line = 842
current word: {w}er

1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit

input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)

Input : t
Word = together Line = 19, 30, 426, 579, 604, 625, 674, 763, 770, 812, 1015
current word: {t}

-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
```

# Personal project #2: Extended Word Finder

- 프로그램 기능 상세 사항

- 프로그램 실행 중 기능 1을 실행할 시 기능 2, 3의 결과도 1의 결과에 맞춰 출력

```
~/extendedwordfinderproject
current word: {b}er
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: 1
Selected Command is : 1. Search word (in text file)
단어를 입력하세요: betra{2}

first : 0, second : 2
find word complete

current word: betra{2}
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: 2
Selected Command is : 2. Display all word (in 1's result)

Word = betrays   Line = 935
current word: betra{2}
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----

input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)
```

# Personal project #2: Extended Word Finder

- 프로그램 기능: 4. Quit
  - 프로그램 종료

```
~/extendedwordfinderproject
input command: 2
Selected Command is : 2. Display all word (in 1's result)
Word = betrays   Line = 935
current word:  betra{2}
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 3
Selected Command is : 3. Display alphabet word(in 1's result)
Input : b
Word = betrays   Line = 935
current word:  betra{2}
-----
1. Search word (in text file)
2. Display all word (in 1's result)
3. Display alphabet word(in 1's result)
4. Quit
-----
input command: 4
T420s@T420s-PC ~/extendedwordfinderproject
$
T420s@T420s-PC ~/extendedwordfinderproject
$
T420s@T420s-PC ~/extendedwordfinderproject
$
T420s@T420s-PC ~/extendedwordfinderproject
$
```

# Personal project #2: Extended Word Finder

- **과제 제출 & 포맷**

- E-mail: [dslab.pp@gmail.com](mailto:dslab.pp@gmail.com)

- A반: 목요일, 금요일 (11:00~13:00) 602호

- B반: 목요일, 금요일 (15:30~17:30) 402호

- 메일 제목: [프프#반]학번\_이름\_개인프로젝트2

- [프프#B]201111339\_김민우\_개인프로젝트2

- 파일 이름: [프프#반]학번\_이름\_개인프로젝트2.file

- [프프#A]201111339\_김민우\_개인프로젝트2.file

- 메일 제목과 파일명이 위의 **포맷과 다를 경우 미제출 처리**

- **제출 일자**

- 4월 19일 수요일 23:59

- **프로젝트 제출 파일 List**

- Code(wordfinder\_extended.c), 실행파일(wordfinder\_extended.exe)

- 실행 파일과 코드를 포함하여 **압축 후 확장자를 ".file" 로 변경하여 제출**