과제 11 – 01

```c
#include <stdio.h>
#include <string.h>

int main(void) {
    char *string = "Hello world!";
    int length = 0;

    length = strlen(string);
    for (int i=0; i<length; i++) {
        if (('a' <= string[i]) && (string[i] <= 'z')) printf("%c", string[i]-'a'+'A');
        else if (('A' <= string[i]) && (string[i] <= 'Z')) printf("%c", string[i]-'A'+'a');
        else printf("%c", string[i]);
    }

    return 0;
}
```
```
→ Tasks ./task11-1
hELLO WORLD!%
```

과제 11 – 02

```c
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

int main(void) {
    int num = 0;

    scanf("%d", &num);
    getchar();

    char **string = (char **)malloc(num*(sizeof(char *)));

    for (int i=0; i<num; i++) {
        string[i] = (char *)malloc(100*sizeof(char));
        fgets(string[i], 100, stdin);
    }
    for (int j=0; j<num; j++) {
        fputs(string[j], stdout);
        free(string[j]);
    }
    free(string);

    return 0;
}
```

```
→  Tasks ./task11-2
3
Hello world!
C Programming is pretty fun.
Sorry, just kidding.
Hello world!
C Programming is pretty fun.
Sorry, just kidding.
```

과제 11 – 03

```c
#include <stdio.h>
#include <string.h>

int main(void) {
    char string[100] = {0, };
    int length = 0;

    fgets(string, 100, stdin);
    length = strlen(string);

    for (int i=1; i<length; i++) {
        printf("%c", string[length-i-1]);
    }

    return 0;
}
```

```
→  Tasks ./task11-3
Hello World!
!dlroW olleH
```

과제 11 – 04

```c
#include <stdio.h>
#include <string.h>

int main(void) {
    char string[100] = {0, };
    char concat[50] = {0, };

    while (1) {
        scanf("%s", concat);
        if (!strcmp(concat, "end")) break;
        strcat(string, concat);
        strcat(string, " ");
        fputs(string, stdout);
        printf("\n");
    }

    return 0;
}
```

```
→  Tasks ./task11-4
I
I
am
I am
your
I am your
father
I am your father
end
→  Tasks 
```

과제 11 – 05

```c
#include <stdio.h>
#include <string.h>

int main(void) {
    char string[200] = {0, };
    int word = 0;
    int is = 0;
    char delimeter[2] = " ";
    char *token;

    fgets(string, 200, stdin);
    token = strtok(string, delimeter);

    while (token != NULL) {
        word++;
        if (!strcmp(token, "is") || !strcmp(token, "Is") || !strcmp(token, "IS"))
is++;
        token = strtok(NULL, delimeter);
    }

    printf("Word count: %d, is count: %d", word, is);

    return 0;
}
```

```
→  Tasks ./task11-5
Hi. This is C programming class.
Word count: 6, is count: 1%
→  Tasks ./task11-5
What is the problem? Is that hypothesis true?
Word count: 8, is count: 2%
```