プログラミング入門Ⅱ　演習報告書

課題番号：３

国田 将人

学籍番号: 201111361

s1111361@coins.tsukuba.ac.jp

2012-01-23

課題１

リスト

#include <stdio.h>

int main(int argc, char \*argv[])

{

int count;

FILE \*fp;

if (argc != 2)

{

printf("missing file argument.\n");

return 1;

}

if ((fp = fopen(argv[1], "r")) == NULL)

{

printf("can't open %s\n", argv[1]);

return 1;

}

count = 0;

while (fgetc(fp) != EOF)

count++;

printf("%d chars\n", count);

fclose(fp);

return 0;

}

実行結果

課題2

cosmos08:3\_120118 s1111361$ ./q3\_1 q3\_1.c

426 chars

リスト

#include <stdio.h>

int main(int argc, char \*argv[])

{

int ch;

FILE \*sfp, \*dfp;

if (argc != 3)

{

printf("missing file argument.\n");

return 1;

}

if ((sfp = fopen(argv[1], "r")) == NULL)

{

printf("can't open %s", argv[1]);

return 1;

}

if ((dfp = fopen(argv[2], "w")) == NULL)

{

printf("can't open %s", argv[2]);

fclose(sfp);

return 1;

}

while ((ch = fgetc(sfp)) != EOF)

if ('a' <= ch && ch <= 'z')

fputc(ch - 0x20, dfp);

else

fputc(ch, dfp);

fclose(dfp);

fclose(sfp);

return 0;

}

実行結果

課題3

cosmos08:3\_120118 s1111361$ echo sAmPle > test

cosmos08:3\_120118 s1111361$ ./q3\_2 test test2

cosmos08:3\_120118 s1111361$ cat test

sAmPle

cosmos08:3\_120118 s1111361$ cat test2

SAMPLE

リスト

実行結果

#include <stdio.h>

#include <limits.h>

#define MAX\_ITEM 100

#define MAX\_NAME\_LENGTH 256

int main(int argc, char \*argv[])

{

int i, j, count;

int min\_score, min\_score\_idx;

char name[MAX\_ITEM][MAX\_NAME\_LENGTH];

int score[MAX\_ITEM];

FILE \*fp;

if (argc != 2)

{

printf("missing file argument.\n");

return 1;

}

if ((fp = fopen(argv[1], "r")) == NULL)

{

printf("can't open %s\n", argv[1]);

return 1;

}

i = 0;

while(fscanf(fp, "%s %d", name[i], &score[i]) != EOF)

i++;

count = i;

fclose(fp);

printf("File contains %d items.\n", count);

printf("Name\tScore\n");

for(j = 0; j < count; j++)

{

min\_score = INT\_MAX;

min\_score\_idx = 0;

for(i = 0; i < count; i++)

{

if (0 <= score[i] && score[i] < min\_score)

{

min\_score = score[i];

min\_score\_idx = i;

}

}

printf("%s\t%d\n", name[min\_score\_idx], score[min\_score\_idx]);

score[min\_score\_idx] = -1;

}

return 0;

}

cosmos08:3\_120118 s1111361$ ./q3\_3 prog2-ex3-data.txt

File contains 20 items.

Name Score

Kojima 10

Kuno 10

Miura 12

Ojima 30

Yamada 33

Nagai 35

Kudou 40

Kawasaki 40

Kameda 44

Sato 50

Takahasi 60

Suzuki 60

Suda 65

Hayashi 66

Kato 70

Matumoto 70

Akiyama 80

Kimura 85

Nakamura 95

Saitou 95