2022/10/14

자료구조(01)

Programming Assignment Ⅱ

컴퓨터공학과

학번: 20202106

이름: OSHIMA ASUKA

자료구조 HW2

20202106 OSHIMA ASUKA

NO1.

```
int main() {

    Get the line of the string and pattern from stdin
    Function call.

}

void fail()
{

    failure[0]: -1
    beign
    for j = 1 to j< length of pattern
        i = failure[j - 1];
      begin
        while ((pat[j] ≠ pat[i + 1]) && (i >= 0))
            i = failure[i];
        if  :pat[j] = pat[i + 1]  then failure[j] = i + 1;
        else failure[j] :-1;
    }
}
int pmatch_all()
{

        begine
        while i < lens && j < lenp;)

            if (string[i] == pat[j]) then i++; j++
            else if (j == 0) then i++;
            else j = failure[j - 1] + 1;
        end
        if (j == lenp) then return i-lenp


        else return -1;

}
```

행 33, 열 13

No. 2

자료구조 HW2

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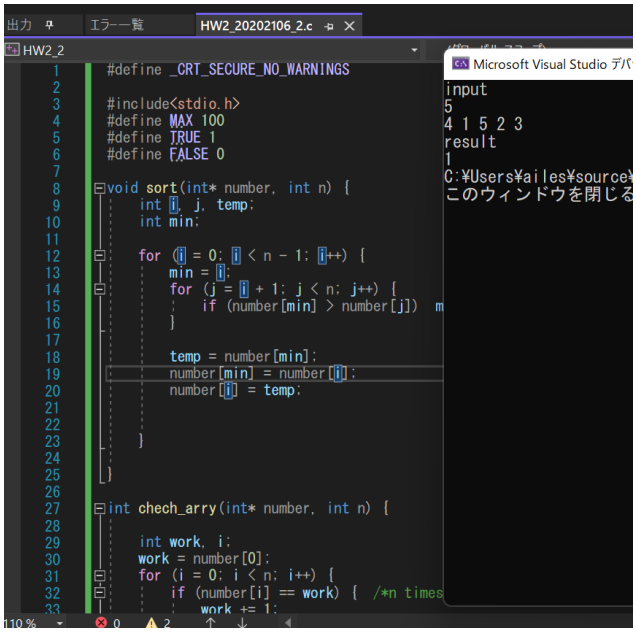
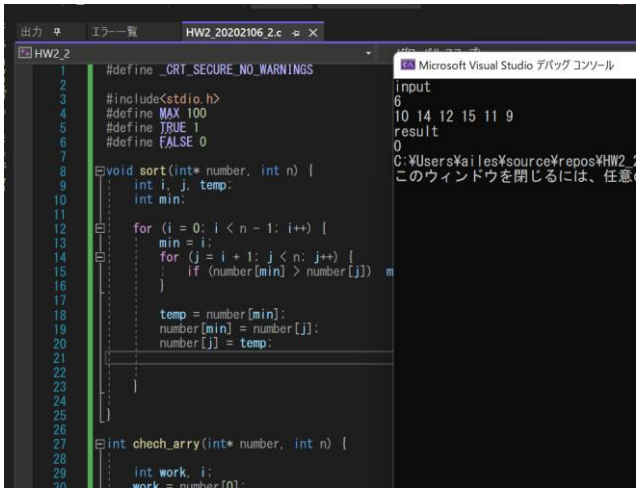
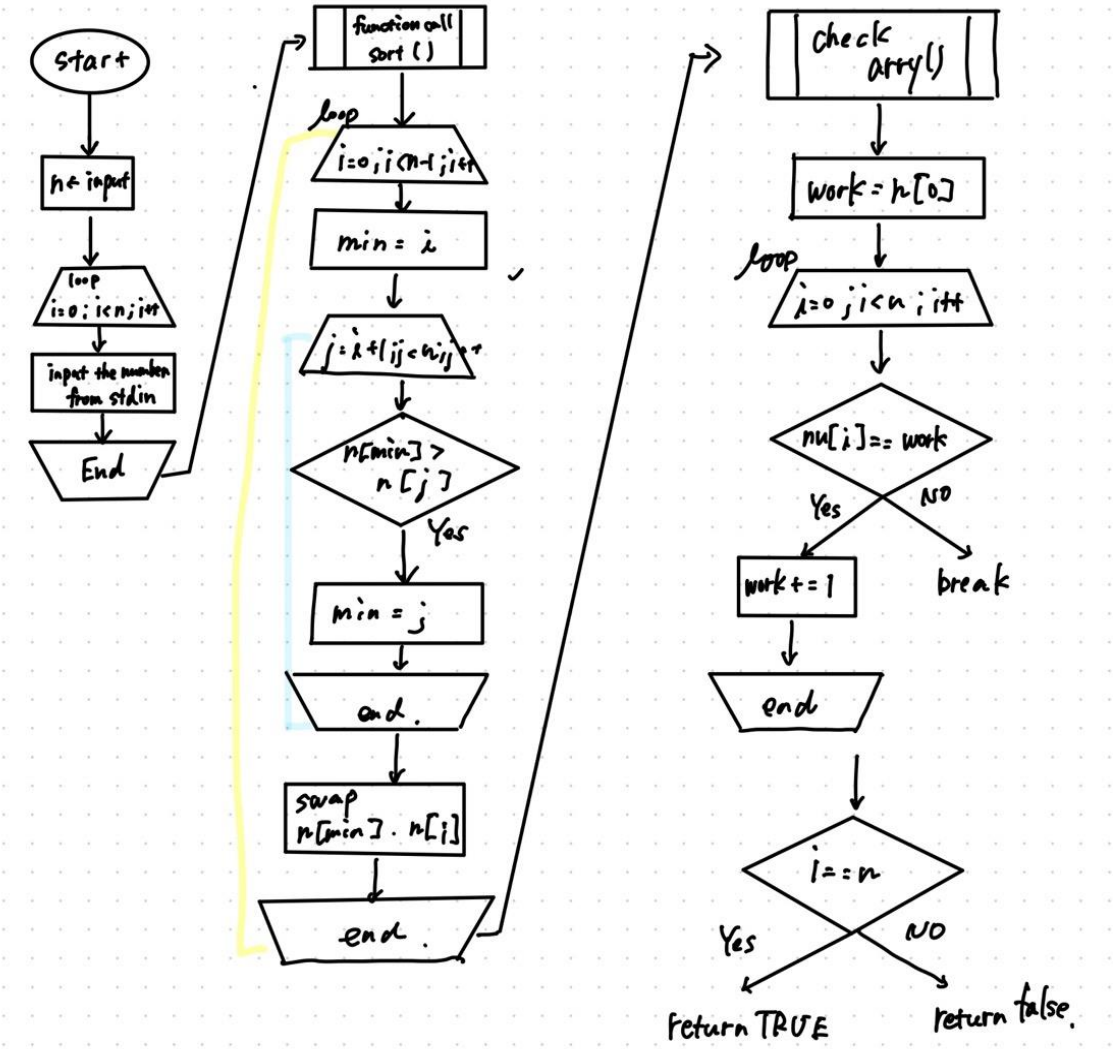
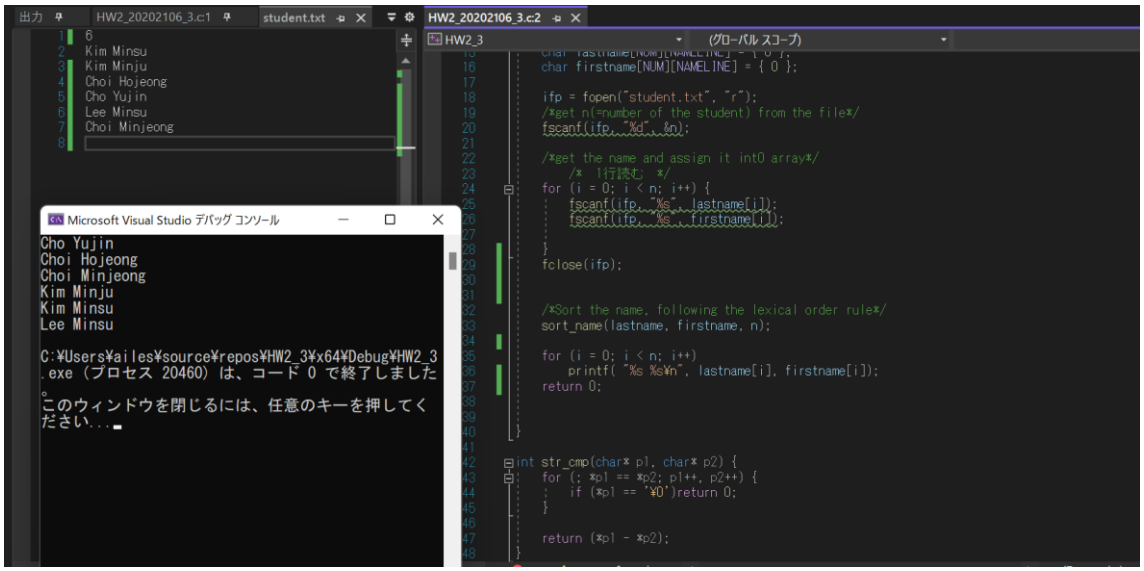




```
HW2_2

int main() {


          n←input the number of inputs
          int num[]←input the "n" numbers


      put n numbers in the num[] in order from smallest to largest by "sort function"
      sort(num[] n)


      chech_arry()
      return


}

void sort() {


          for i = 0 to N.length-1
                    min = i;
                    for j = i + 1 to N.length -t
                              if (num[min] > num
                [j])  min = j;

       swap num[i] and  num[min]




}

int chech_arry() {

          work ← num[0]  count up from work=num[0] to num[n]

          for i = 0 to N.length
                if num[i] == work
                              work += 1;

                    else break; return FALSE

     if the number of counting == the number of elements
          if (i == n)               return TRUE;


}
```

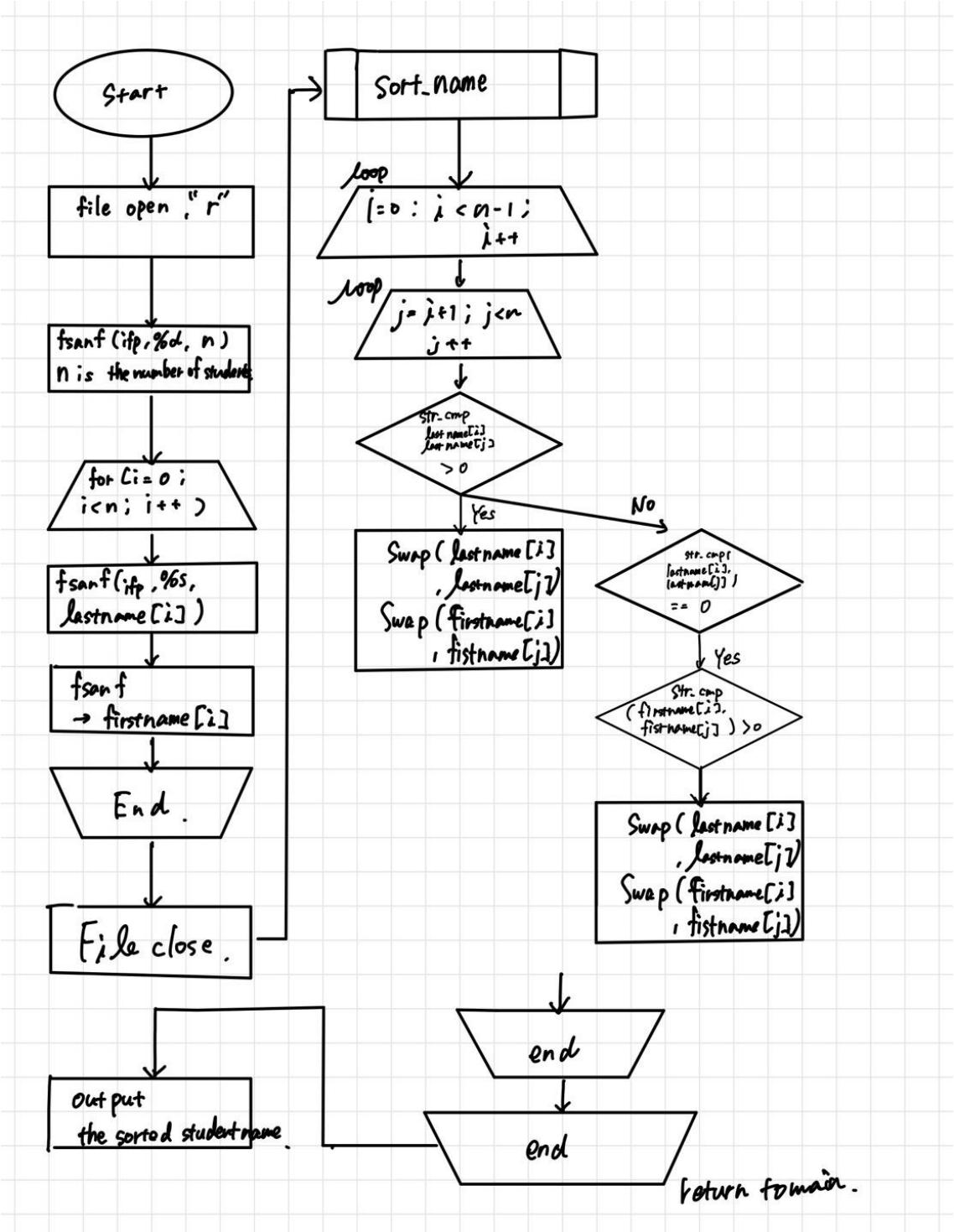

start
n= input
loop
i=0;i<n;i++
input the number from stdin
End
function call sort()
loop
i=0;i<n-1;i++
min = i
j=i+1;j<n;j++
n[min] > n[j]
Yes
min = j
end
swap n[min], n[i]
end
check array()
work = n[0]
loop
i=0;i<n;i++
nu[i] == work
Yes
NO
work+=1
break
end
i==n
Yes
NO
return TRUE
return false

3


student.txt
6
Kim Minsu
Kim Minju
Choi Hojeong
Cho Yujin
Lee Minsu
Choi Minjeong
Microsoft Visual Studio デバッグ コンソール
Cho Yujin
Choi Hojeong
Choi Minjeong
Kim Minju
Kim Minsu
Lee Minsu
C:¥Users¥ailes¥source¥repos¥HW2_3¥x64¥Debug¥HW2_3.exe (プロセス 20460) は、コード 0 で終了しました。
このウィンドウを閉じるには、任意のキーを押してください...
HW2_20202106_3.c2
HW2_3
(グローバル スコープ)
char firstname[NUM][NAMELINE] = { 0 };
ifp = fopen("student.txt", "r");
/*get n(=number of the student) from the file*/
fscanf(ifp, "%d", &n);
/*get the name and assign it int0 array*/
/* 1行読む */
for (i = 0; i < n; i++) {
fscanf(ifp, "%s", lastname[i]);
fscanf(ifp, "%s", firstname[i]);
}
fclose(ifp);
/*Sort the name, following the lexical order rule*/
sort_name(lastname, firstname, n);
for (i = 0; i < n; i++)
printf("%s %s¥n", lastname[i], firstname[i]);
return 0;
int str_cmp(char* p1, char* p2) {
for (; *p1 == *p2; p1++, p2++) {
if (*p1 == '¥0')return 0;
}
return (*p1 - *p2);

```
int main() {

    Read file
    Get n(=number of the student) from the file*/

    Get the name from the file and assign it array
     for i<n i++
        lastname[i]
        firstname[i]
    Close file.

    Sort the name, following the lexical order rule.
      function  sort_name()

    Output the sorted name
      for (i = 0; i < n; i++)
            stdout ←lastname[i], firstname[i]

}

int str_cmp(char* p1, char* p2) {
    Copmare two strings.

    for (; *p1 == *p2; p1++, p2++) {
        if (*p1 == '¥0')return 0;
    }
    return (*p1 - *p2);
}
```

```
}

char* str_copy(char* dst, const char* src) {
    i = 0;
    while (src[i] != '¥0') {
        dst[i] ← src[i];
        i++;
    }
    dst[i] = '¥0';

    return dst;
}

void sort_name(char lastname[][NAMELINE], char firstname[][NAMELINE], int n) {

    for (i = 0; i < n - 1; i++) {
        for (j = i + 1; j < n; j++) {
            if (str_cmp(lastname[i], lastname[j]) > 0) {
                Swap lastname[i] , lastname[j]
                Swap firstname[i], firstname[j]

            }
            if (if lastnames are equal) {

                if ( Compare firstname:str_cmp(firstname[i], firstname[j]) > 0 ) {
                   Swap lastname[i] , lastname[j]
                   Swap firstname[i], firstname[j]


                }
            }
        }
    }
}
```


Start
file open , "r"
fsanf (ifp, %d, n)
n is the number of students
for (i=0 ; i<n; i++)
fsanf(ifp, %s, lastname[i])
fsanf → firstname[i]
End.
File close.
Sort_name
loop
i=0 : i < n-1 ; i++
loop
j= i+1 ; j<n ; j++
str_cmp (last name[i], last name[j]) > 0
Yes
No
Swap (lastname[i], lastname[j])
Swap (firstname[i], fistname[j])
str_cmp (lastname[i], lastname[j]) == 0
Yes
str_cmp (firstname[i], firstname[j]) > 0
Swap (lastname[i], lastname[j])
Swap (firstname[i], fistname[j])
output the sortod studentname.
end
end
return to main.