

課題 13-1~13-4 のプログラム例

```
#include <stdio.h>
#define N 7

void search_less(char *label[], int value[],
                 int n, int size);
void search_all(char *label[], int value[],
                int n, int size);
void search_tail(char *label[], int value[],
                 int n, int size);

//課題 13-2
void search_less(char *label[], int value[],
                 int n, int size)
{
    int i = 0;
    while(1) {
        if(value[i]<n) {
            printf("label: %s, ", label[i]);
            printf("value: %d\n", value[i]);
            break;
        }
        if(i==size-1) {
            printf("見つかりませんでした\n");
            break;
        }
        i++;
    }
}

//課題 13-3
void search_all(char *label[], int value[],
                int n, int size)
{
    int i = 0;
    int found = 0;
    while(1) {
        if(value[i]==n) {
            printf("label: %s, ", label[i]);
            printf("value: %d\n", value[i]);
            found = 1;
        }
        if(i==size-1) {
            if(found==0) {
                printf("見つかりませんでした\n");
            }
            break;
        }
        i++;
    }
}
```

```
//課題 13-4
void search_tail(char *label[], int value[],
                 int n, int size)
{
    int i = size-1;
    while(1) {
        if(value[i]==n) {
            printf("label: %s, ", label[i]);
            printf("value: %d\n", value[i]);
            break;
        }
        if(i==0) {
            printf("見つかりませんでした\n");
            break;
        }
        i--;
    }
}

int main(void)
{
    char *dates1[N] = {"7/17", "7/18", "7/19", "7/20",
                      "7/21", "7/22", "7/23"};
    int temperature1[N] = {36, 35, 34, 34, 35, 34, 34};

    //課題 13-1
    int temperature2[N] = {26, 26, 25, 25, 25, 24, 24};
    printf("---for temperature2---\n");
    search(dates1, temperature2, 24, N);
    search(dates1, temperature2, 20, N);

    //課題 13-2
    printf("---search_less---\n");
    search_less(dates1, temperature1, 35, N);
    search_less(dates1, temperature1, 29, N);

    //課題 13-3
    printf("---search_all---\n");
    search_all(dates1, temperature1, 34, N);
    search_all(dates1, temperature1, 29, N);

    //課題 13-4
    printf("---search_tail---\n");
    search_tail(dates1, temperature1, 35, N);
    search_tail(dates1, temperature1, 36, N);
    search_tail(dates1, temperature1, 29, N);

    return 0;
}
```