Listing 1　enshukadai9

```c
void dijkstra(struct element *a[], int n, int s)
{
    int i, u, v, sizeofT;
    struct element *l;

    for (i = 1; i <= n; i++){
        T[i] = 1;
        D[i] = INFTY; //2n回分初期化
    }
    T[s] = 0;
    D[s] = 0;
    for (l = a[s]->next; l != NULL; l = l->next)
        D[l->vertex] = l->weight;        //nlog(size)回計算
    sizeofT = n-1;
    while (sizeofT > 0){
        for (v = 1; v <= n; v++)
            if (T[v] == 1)
    printf("v[%d],␣", v);
            else
    printf("␣␣␣␣␣␣");
        for (v = 2; v <= n; v++)
            printf("D[%d]=%d,␣", v, D[v]);
        printf("\n");
        u = findmin(T, n);   //n回探索をする。
        T[u] = 0;
        sizeofT--;
        for (v = 1; v <= n; v++)
            if (T[v] == 1)
    D[v] = min(D[v], D[u]+w[u][v]);//n回演算する。
    //2n+n+n=2nよって時間計算量O(2n)
    }
}
```