

C 言語プログラムの例を示す.

```
int GreaterThan ( int a, int b, int A[maxlength+1] )
{
    if ( A[a]>A[b] ) return 1 ;
    else return 0 ;
} /* GreaterThan */
```

```
void Maximum1&2_1 ( int n, int *max, int *max2, int A[maxlength+1] )
{
    int i ;
    *max = 1 ;
    for ( i = 2 ; i <= n ; i ++ ) {
        if ( GreaterThan( i, *max, A ) ) *max = i ;
    }
    if ( *max == 1 ) *max2 = 2 ;
    else *max2 = 1 ;
    for ( i = 2 ; i <= n ; i ++ ) {
        if ( i != *max && i != *max2 ) {
            if ( GreaterThan( i, *max2, A ) ) *max2 = i ;
        }
    }
} /* Maximum1&2_1 */
```

```
void Maximum1&2_2 ( int n, int *max, int *max2, int A[maxlength+1] )
{
    int i ;
    if ( GreaterThan( 2, 1, A ) ) {
        *max = 2 ;
        *max2 = 1 ;
    }
    else {
        *max = 1 ;
        *max2 = 2 ;
    }
    for ( i = 3 ; i <= n ; i ++ ) {
        if ( GreaterThan( i, *max, A ) ) {
            *max2 = *max ;
            *max = i ;
        }
        else if ( GreaterThan( i, *max2, A ) ) {
            *max2 = i ;
        }
    }
} /* Maximum1&2_2 */
```