

```

        cost[low][high] = bestcost;
        root[low][high] = bestroot;
    )
}

/* Print structure of binary search tree */

print_root(root, 0, n-1);

/* Print the root of the subtree spanning keys
'low' through 'high' */

void print_root (int **root, int low, int high) {
    printf ("Root of tree spanning %d-%d is %d\n",
        low, high, root[low][high+1]);
    if (low < root[low][high+1]-1)
        print_root (root, low, root[low][high+1]-1);
    if (root[low][high+1] < high-1)
        print_root (root, root[low][high+1]+1, high);
}

/* Allocate a two-dimensional array with 'm' rows and
'n' columns, where each entry occupies 'size' bytes */

void alloc_matrix (void ***a, int m, int n, int size)
{
    int i;
    void *storage;
    storage = (void *) malloc (m * n * size);
    *a = (void **) malloc (m * sizeof(void *));
    for (i = 0; i < m; i++) {
        (*a)[i] = storage + i * n * size;
    }
}

```

Figure 8.22 (contd.) C program implementing dynamic programming algorithm to find an optimal binary search tree.

Use the partitioning-communication-agglomeration-mapping design methodology to implement a parallel version of this program. (Hint: You need to find an agglomeration that will allow multiple processes to be computing concurrently.)