```c
#ifndef _CMAZE_H
#define _CMAZE_H

//-1:Wall o 0 obstacle
// 0:free space
// 1:start point
// 2:Goal
/*int Maze[20][20] =
{
    {-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 2, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1}

};
int Bad[20][20] =
{
    { 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1},
    { 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0, 0, 2, 1, 1},
    { 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0, 2, 2, 2, 2, 2, 2, 1, 1},
    { 1, 0, 0, 0, 0, 1, 1, 1, 1, 0, 0, 2, 0, 0, 0, 0, 0, 1, 1, 1},
    { 1, 0, 0, 0, 0, 1, 1, 1, 1, 0, 0, 2, 0, 0, 0, 0, 1, 1, 1, 1},
    { 1, 0, 0, 0, 0, 1, 1, 1, 0, 0, 0, 2, 0, 0, 0, 1, 1, 1, 1, 1},
    { 1, 0, 0, 0, 1, 1, 1, 0, 0, 0, 0, 2, 0, 0, 1, 1, 1,1, 1, 1},
    { 1, 0, 0, 1, 1, 0, 0, 0, 0, 0, 0, 2, 0, 0, 1, 1, 1, 1, 1, 1},
    { 1, 1, 1, 1, 0, 2, 2, 2, 2, 2, 2, 2, 0, 0, 1, 1, 1, 1, 1, 1},
    { 1, 0, 0, 1, 0, 2, 0, 0, 0, 0, 0, 0, 1, 1, 1, 0, 0, 0, 1, 1},
    { 1, 0, 0, 1, 0, 2, 0, 0, 0, 1, 0, 1, 0, 0, 0, 0, 0, 0, 1, 1},
    { 1, 0, 0, 1, 0, 2, 0, 0, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0, 1, 1},
    { 1, 1, 1, 1, 1, 2, 0, 0, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 1},
    { 1, 0, 0, 0, 0, 2, 0, 1, 1, 1, 1, 1, 0, 0, 0, 0, 0, 0, 1, 1},
    { 1, 1, 2, 2, 2, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1},
    { 1, 0, 2, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1},
    { 1, 0, 2, 0, 0, 1, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1},
    { 1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1},
    { 1, 0, 1, 0, 0, 1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 1},
    { 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1}

};*/
int Maze[20][20] =
{
    {-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1},
    {-1, 0, 0,-1, 0, 0,-1, 0,-1, 0,-1, 0, 0, 0, 0, 0, 0, 2,-1,-1},
    {-1,-1,-1, 0,-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1, 0, 0, 0,-1, 0, 0, 0,-1},
```

```c
    {-1,-1, 0, 0, 0, 0, 0,-1, 0,-1,-1, 0,-1,-1, 0, 0, 0, 0, 0,-1},
    {-1,-1, 0, 0, 0,-1, 0, 0, 0, 0,-1,-1, 0, 0, 0, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0,-1, 0,-1, 0, 0,-1,-1,-1, 0, 0,-1},
    {-1,-1, 0, 0, 0, 0,-1,-1, 0,-1, 0, 0, 0,-1, 0, 0, 0, 0, 0,-1},
    {-1,-1, 0, 0, 0,-1, 0,-1, 0, 0, 0, 0,-1, 0,-1, 0, 0, 0,-1,-1},
    {-1, 0,-1, 0, 0, 0, 0,-1, 0,-1, 0, 0,-1,-1, 0, 0,-1, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0,-1, 0,-1, 0, 0, 0, 0,-1, 0, 0,-1,-1, 0,-1},
    {-1,-1, 0, 0,-1, 0,-1, 0, 0, 0, 0,-1,-1, 0,-1, 0, 0, 0,-1,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1, 0,-1, 0, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0,-1, 0, 0,-1, 0, 0, 0, 0,-1,-1, 0, 0,-1},
    {-1, 0, 0, 0, 0, 0, 0, 0, 0,-1, 0, 0, 0, 0, 0,-1,-1, 0,-1,-1},
    {-1, 0, 0, 0,-1, 0, 0, 0,-1, 0, 0, 0, 0, 0, 0, 0, 0,-1,-1,-1},
    {-1, 0,-1, 0,-1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,-1, 0,-1},
    {-1, 0, 1,-1,-1,-1, 0, 0, 0, 0,-1,-1, 0,-1, 0,-1, 0, 0, 0,-1},
    {-1, 0, 0, 0, 0,-1, 0, 0, 0, 0, 0, 0, 0, 0,-1,-1, 0, 0,-1,-1},
    {-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1,-1}
};
int Bad[20][20] =
{
    {1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1},
    {1,0,0,1,0,0,1,0,1,0,1,0,0,0,0,1,0,2,1,1},
    {1,1,1,0,1,0,1,1,1,1,1,1,1,1,1,1,0,2,1,1},
    {1,0,0,0,1,1,1,0,1,1,1,1,0,0,0,0,0,2,1,1},
    {1,1,0,0,1,0,1,1,1,1,1,0,0,0,0,0,2,2,1,1},
    {1,1,0,0,1,1,1,0,1,1,1,0,2,2,2,2,2,0,1,1},
    {1,0,0,0,1,1,1,1,1,1,0,0,2,0,1,1,1,0,1,1},
    {1,1,0,0,1,1,1,1,0,1,0,2,2,0,0,0,1,1,1,1},
    {1,1,0,0,1,1,0,1,0,0,0,2,0,1,1,1,1,1,1,1},
    {1,1,1,0,1,0,0,1,0,0,0,2,0,1,1,1,1,1,0,1},
    {1,1,1,1,1,1,1,0,0,0,2,2,0,1,0,0,1,1,0,1},
    {1,1,1,0,0,0,0,0,0,2,2,0,1,1,1,0,0,0,1,1},
    {1,1,0,2,2,2,2,2,2,2,0,1,1,0,1,0,0,0,0,1},
    {1,1,0,2,0,0,0,0,0,0,0,1,0,0,0,1,1,0,0,1},
    {1,1,0,2,0,1,1,1,1,1,1,1,0,0,0,1,1,0,1,1},
    {1,2,2,2,1,1,1,1,1,1,1,1,0,0,0,0,0,1,1,1},
    {1,2,0,0,0,1,0,0,0,1,0,1,1,1,1,1,1,1,0,1},
    {1,2,2,1,1,1,0,1,0,0,1,1,0,1,0,1,1,0,0,1},
    {1,1,1,1,1,1,0,0,0,0,0,0,0,0,1,1,1,1,1,1},
    {1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1}
};

#endif
```