

General program flow in C code.

The program output is different but this is general idea.

```
void game(int row, int column, int time){
    char **map;

    for(int i=0; i < time; i++){
        if(i==0){
            map = create_map(row, column);
            fill_map_user(map, row, column);
        }
        else if( (i-1) % 2 == 0){
            fill_map_bomberman(map,row, column);
            printf("bomberman filled the map \n");
        }
        else if ((i-1) % 2 == 1){
            bomb(map,row,column);
            printf("bombs are explodes \n");
        }
        printf("////////////////////////////////\n");
        print_map(map, row, column);
        printf("////////////////////////////////\n");
    }
}
```

I keep general information in register like this:

T0	I outer loop iteration
T1	K inner loop iteration
T2	Index of array , multiplication of row and column
T3	Memory place of map array
T4	Reading array and writng array byte
T5	1' and 2' complement
T6	Jump previous element
T7	Include of previous element
T8	I Game loop iteration
T9	

S0	Row number
S1	Column number
S2	Time number
S3	' ' Character (Empty space)
S4	'O' Character (Planted bomb)
S5	'X' Character (Triggered bomb)
S6	Keep ra register because we use functions in the function
S7	Keep the initial position in S7

Running and Result:

```
Please enter the row
4
Please enter the column
4
Please enter the time of game
5

Enter the map (char by char) don't enter just write char
...O
.O..
....
..O.

Map,s Printing

...O
.O..
....
..O.

Map,s Printing

0000
0000
0000
0000
```

```
Map,s Printing

O...
....
O..O
O...

Map,s Printing

0000
0000
0000
0000

Map,s Printing

..00
.OO.
....
..O.

-- program is finished running (dropped off bottom) --
```

Please give attention when given true input characters which are 'O' and ''