Example: 27 x 9

9.ox

```
typedef struct s_map
{
        char    full;
        char    empty;
        char    obstacle;
        int     line_nbr;
        int     line_size; (28)
        char    **tab;
} t_map;

typedef struct s_square
{
        int     pos_x;
        int     pos_y;
        int     size;
} t_square;
```

biggest
square
pos_x = 5
pos_y = 0
size =7

tab[0] . . . .

tab[1] . . . . . O . . . .

tab[2] . . . . O . . . .

tab[3] . . . .

tab[4] . . . . . O . . . .

tab[5] . . . . O . . . .

tab[6] . . . .

tab[7] . . . . O . . . . O . . . . . .

tab[8] . . O . . . . O . . . .

calc_size_square()

```
int i;

i = 0;
while (i <= size)
{
    if (y + size >= map.line_nbr || map.tab[y + size][x + i] != map.empty)
        return (size);
    if (y + i >= map.line_nbr || map.tab[y + i][x + size] != map.empty)
        return (size);
    i++;
}
return (calc_size_square(y, x, map, size + 1));
```

resolv()

```
square = init_square(0, 0, -1);
y = 0;
while (y < map->line_nbr - square.size)
{
    x = 0;
    while (x < map->line_size - square.size)
    {
        tmp = calc_size_square(y, x, *map, 0);
        if (tmp > square.size)
            square = init_square(y, x, tmp);
        x++;
    }
    y++;
}
```