### Challenge 1:

- For the first challenge, the board was set up. Visual studio needed to compile to code and the board needed to be displayed on the board. This was a matter of following the instruction in the readme file. The steps were like those in week 5. After fiddling around for a bit, the code compiled, and the board was displayed on the screen.
- Then the board class was made which takes the board from the" board.def", this
  object is later used for placing Pacman on the map.

# • Challenge 2:

An Entity class was made, and a MovableEntity class was made that extends this
class. Also, game logic was written for the main file to make Pacman move one block
every tick. The amount of ticks is increased by the game update function. In the main
loop, the change in ticks is detected and Pacman is moved forward.

### • Challenge 3:

 An Eatable class was made that extends entity. The eatables have a value for when Pacman collides with them. In the main loop a utility function fills the map with Eatable objects(dots).

## • Challenge 4/5:

- A Ghost class was made that extends the MovableEntity class. This implements the movements of the ghosts.
- Here also a dedicated Pacman class was created with implements the behavior when Pacman collides with Ghost object and Eatable objects. When Pacman collides with ghosts he should return to his initial spot and ghosts are returned to the Ghost-penn

#### Challenge 6:

- Now the energizers were implemented. The Ghost class was extended with behavior when they become scared. For a certain amount of game ticks they are scared. Also, they should give points when and have a different sprite when scared.
- The collision detection in the Pacman class was extended to also detect when he
  eats energizers (eatables with value 0). Pacman than makes the ghosts scared. And
  the ghosts should be put in the Ghost-penn and become normal again

## • Challenge 7:

 A Fruit class was made. When a fruit is spawned it gives itself a random position on the map. In the main loop, there is an logic statement that checks if a certain point threshold is reached, and if it is reached it spawns a random kind of fruit and it increases the threshold.