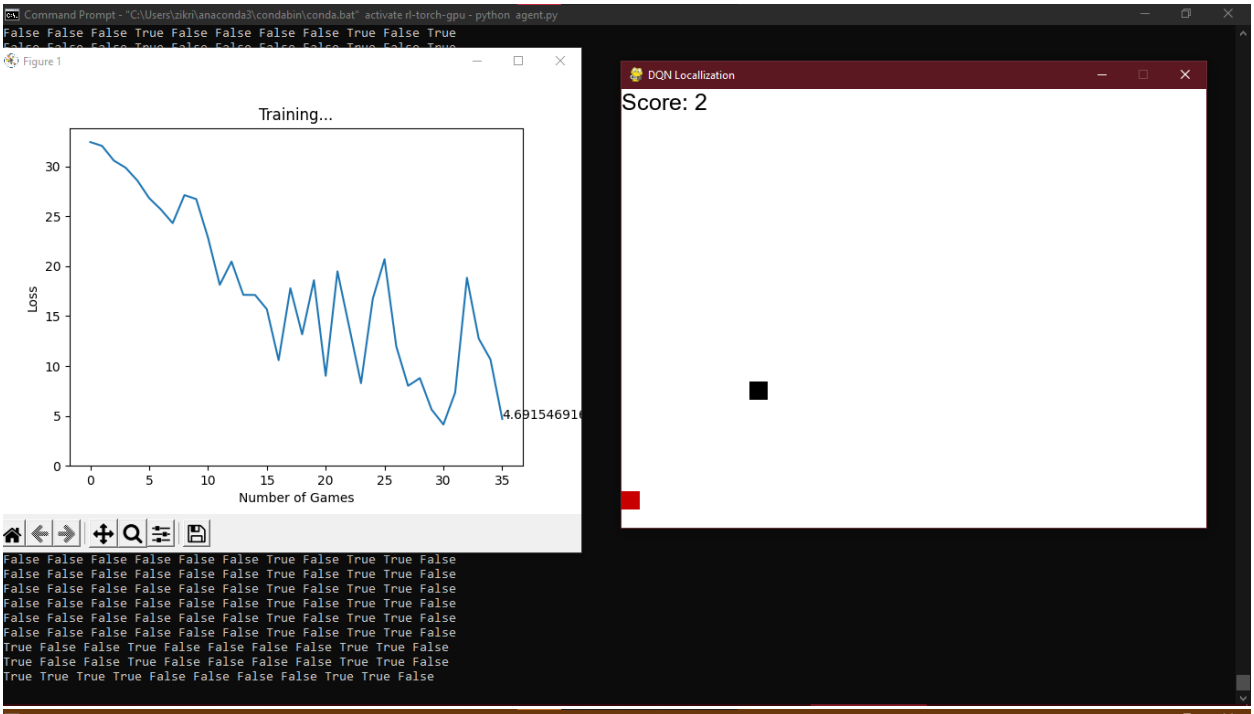
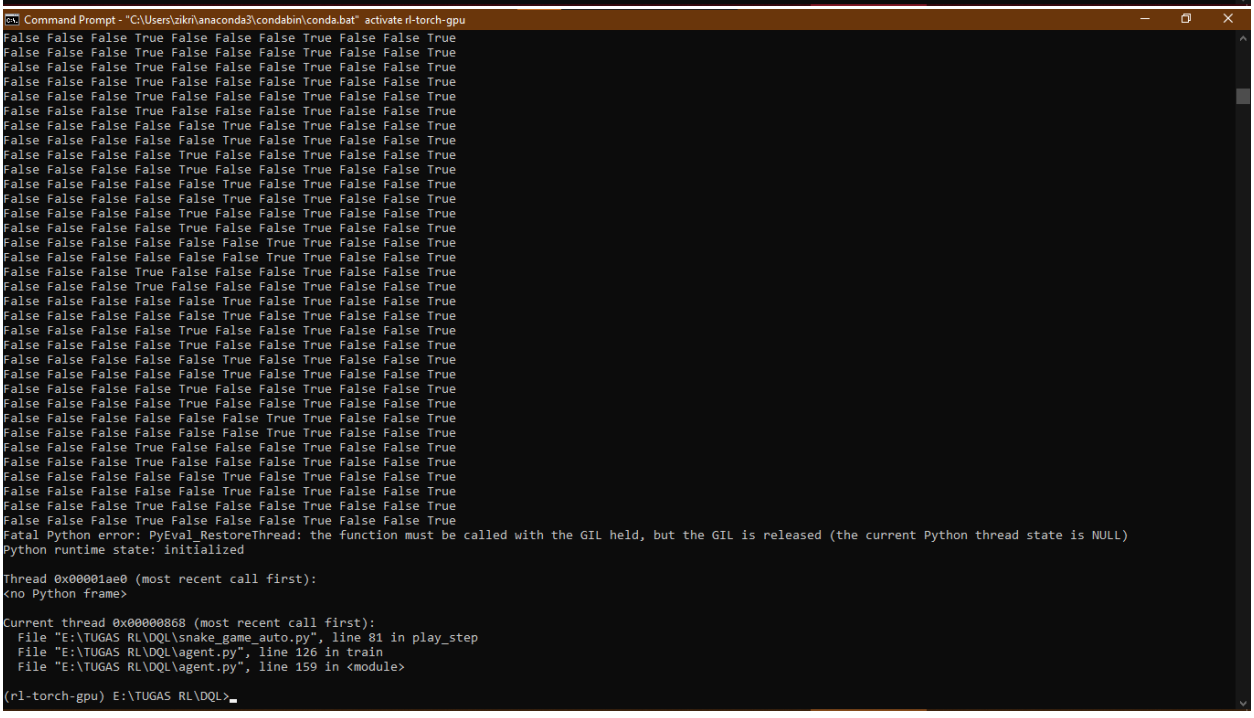
DQL

Installed Library dan dependencies = pip install -r requirements.txt

atau instal manual seperti, pandas matplotlib, pip instal torch, pygame dan IPython

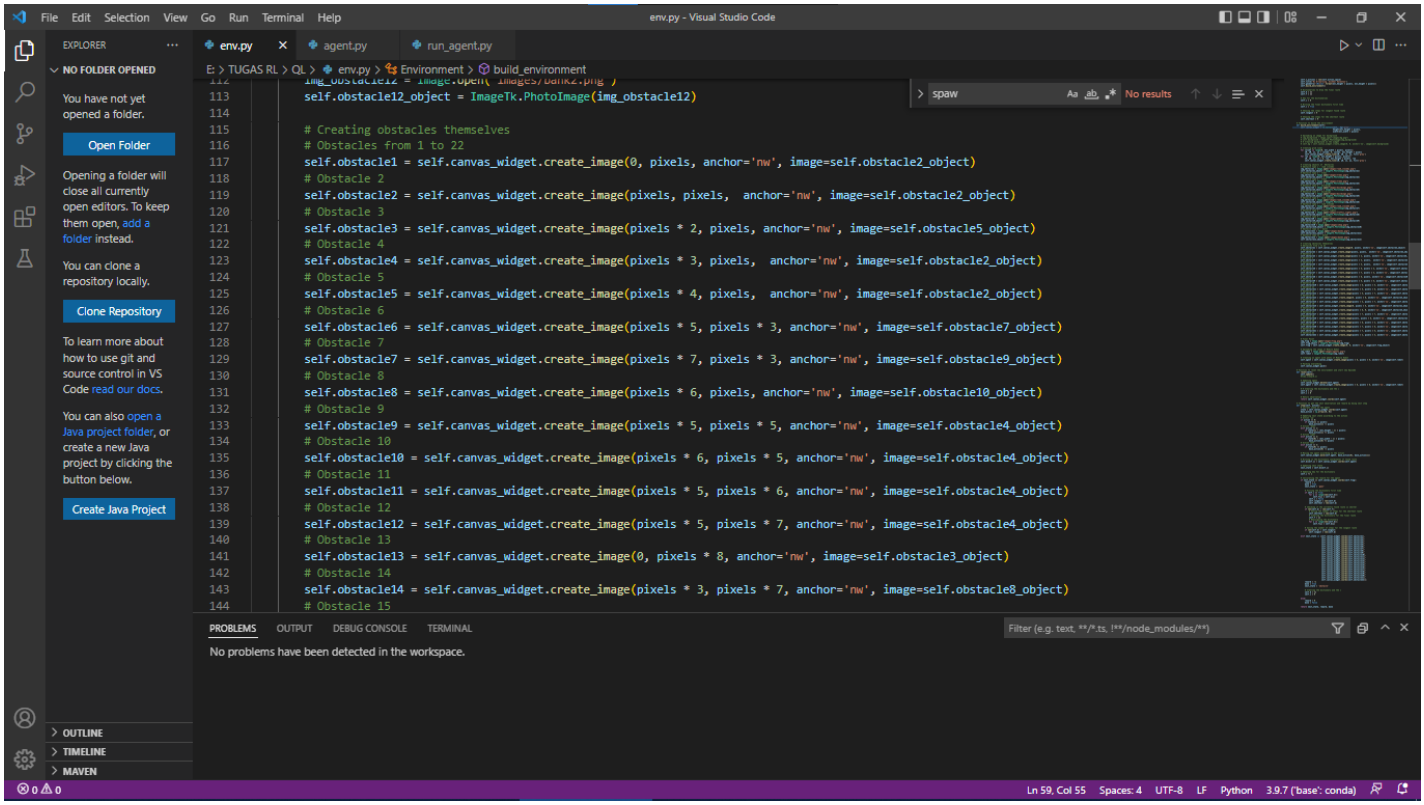
dari yang saya simpulkan bahwa memori saya tidak cukup kuat menjalankan perulangan sampe berkali-kali dan membuat hasil run berhenti sendiri.





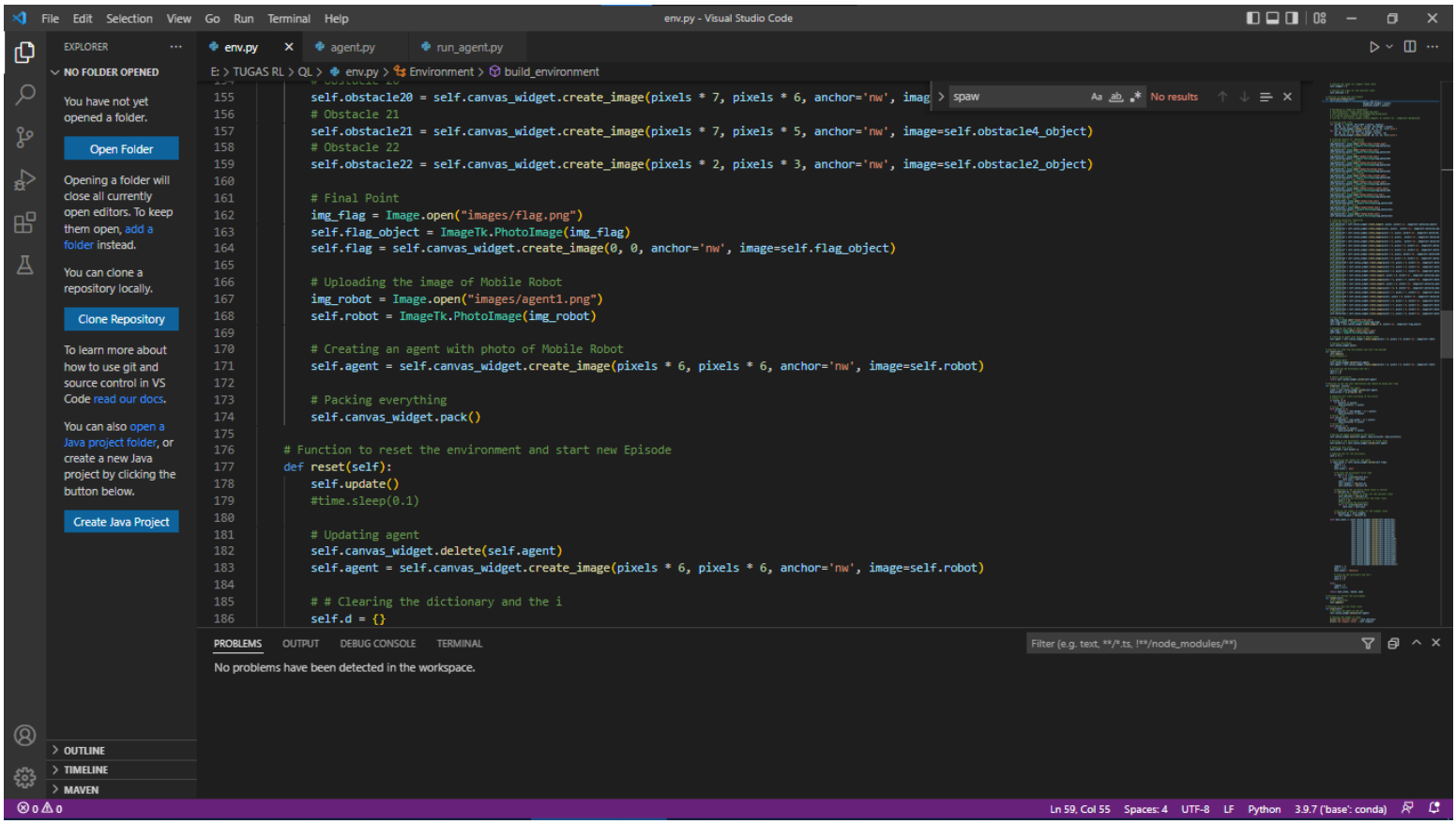
QL

Saya telah merubah tampilan environmentnya dan titik start serta gaols/flag



```
        self.obstacle12_object = ImageTk.PhotoImage(img_obstacle12)

        # Creating obstacles themselves
        # Obstacles from 1 to 22
        self.obstacle1 = self.canvas_widget.create_image(0, pixels, anchor='nw', image=self.obstacle2_object)
        # Obstacle 2
        self.obstacle2 = self.canvas_widget.create_image(pixels, pixels,  anchor='nw', image=self.obstacle2_object)
        # Obstacle 3
        self.obstacle3 = self.canvas_widget.create_image(pixels * 2, pixels, anchor='nw', image=self.obstacle5_object)
        # Obstacle 4
        self.obstacle4 = self.canvas_widget.create_image(pixels * 3, pixels,  anchor='nw', image=self.obstacle2_object)
        # Obstacle 5
        self.obstacle5 = self.canvas_widget.create_image(pixels * 4, pixels,  anchor='nw', image=self.obstacle2_object)
        # Obstacle 6
        self.obstacle6 = self.canvas_widget.create_image(pixels * 5, pixels * 3, anchor='nw', image=self.obstacle7_object)
        # Obstacle 7
        self.obstacle7 = self.canvas_widget.create_image(pixels * 7, pixels * 3, anchor='nw', image=self.obstacle9_object)
        # Obstacle 8
        self.obstacle8 = self.canvas_widget.create_image(pixels * 6, pixels, anchor='nw', image=self.obstacle10_object)
        # Obstacle 9
        self.obstacle9 = self.canvas_widget.create_image(pixels * 5, pixels * 5, anchor='nw', image=self.obstacle4_object)
        # Obstacle 10
        self.obstacle10 = self.canvas_widget.create_image(pixels * 6, pixels * 5, anchor='nw', image=self.obstacle4_object)
        # Obstacle 11
        self.obstacle11 = self.canvas_widget.create_image(pixels * 5, pixels * 6, anchor='nw', image=self.obstacle4_object)
        # Obstacle 12
        self.obstacle12 = self.canvas_widget.create_image(pixels * 5, pixels * 7, anchor='nw', image=self.obstacle4_object)
        # Obstacle 13
        self.obstacle13 = self.canvas_widget.create_image(0, pixels * 8, anchor='nw', image=self.obstacle3_object)
        # Obstacle 14
        self.obstacle14 = self.canvas_widget.create_image(pixels * 3, pixels * 7, anchor='nw', image=self.obstacle8_object)
        # Obstacle 15
```



```
        self.obstacle20 = self.canvas_widget.create_image(pixels * 7, pixels * 6, anchor='nw', imag
        # Obstacle 21
        self.obstacle21 = self.canvas_widget.create_image(pixels * 7, pixels * 5, anchor='nw', image=self.obstacle4_object)
        # Obstacle 22
        self.obstacle22 = self.canvas_widget.create_image(pixels * 2, pixels * 3, anchor='nw', image=self.obstacle2_object)

        # Final Point
        img_flag = Image.open("images/flag.png")
        self.flag_object = ImageTk.PhotoImage(img_flag)
        self.flag = self.canvas_widget.create_image(0, 0, anchor='nw', image=self.flag_object)

        # Uploading the image of Mobile Robot
        img_robot = Image.open("images/agent1.png")
        self.robot = ImageTk.PhotoImage(img_robot)

        # Creating an agent with photo of Mobile Robot
        self.agent = self.canvas_widget.create_image(pixels * 6, pixels * 6, anchor='nw', image=self.robot)

        # Packing everything
        self.canvas_widget.pack()

    # Function to reset the environment and start new Episode
    def reset(self):
        self.update()
        #time.sleep(0.1)

        # Updating agent
        self.canvas_widget.delete(self.agent)
        self.agent = self.canvas_widget.create_image(pixels * 6, pixels * 6, anchor='nw', image=self.robot)

        # # Clearing the dictionary and the i
        self.d = {}
```

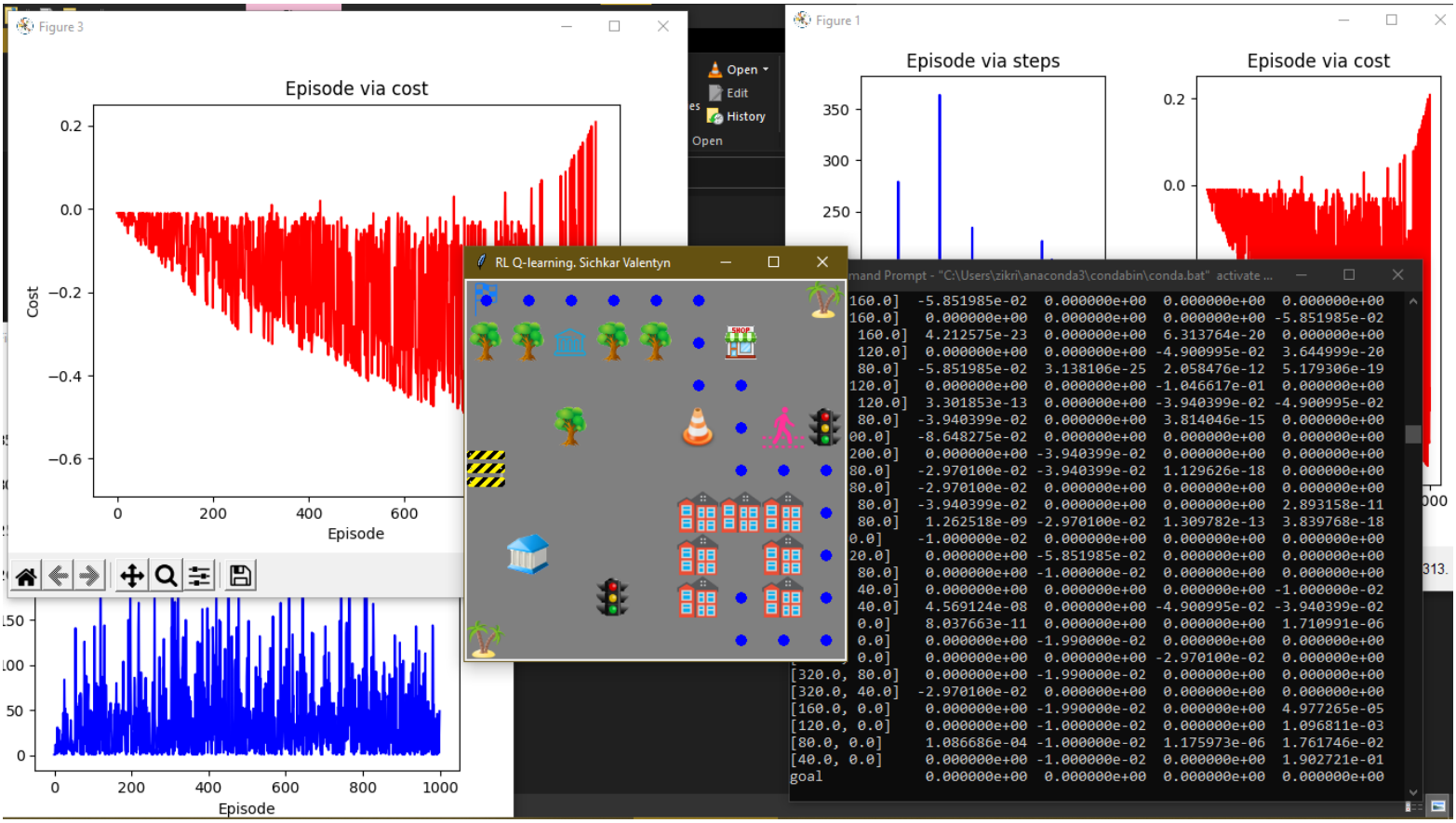


Figure 3
Episode via cost
Cost
Episode
Figure 1
Episode via steps
Episode via cost
RL Q-learning. Sichkar Valentyn
Open
Edit
History
Open
Episode
goal