~/Documents/Saint Louis/TIPE/TIPE2/Image-Converter-2D.py

```
1  import time, pygame, sys, os
2  pygame.init
3  width, height = 600, 600
4  centerCoords = 300, 300
5  backgroundColor = 255, 255, 255
6  pygame.display.set_caption("Road")
7  pausetime = 0.5
8
9  carHeight = 20
10
11 colorCar1 = 255, 0, 0
12 colorCar2 = 0, 255, 0
13 colorCar3 = 0, 0, 255
14
15 #fake Variables
16 printColor = 0, 0, 0
17 centerEmpty = backgroundColor
18 centerRight = colorCar1
19 centerDown = colorCar2
20 Right = colorCar1
21 Down = colorCar2
22
23 carColors = [backgroundColor, printColor, printColor, printColor, centerEmpty, centerRight, centerDown, Right, Down]
24
25 screen = pygame.display.set_mode((width, height))
26
27 dir = sys.argv[1]
28
29 dirList = []
30 for filename in os.listdir(dir) :
31     dirList.append(filename)
32
33 dirList = sorted(dirList)
34
35 for filename in dirList :
36     f = open(str(dir + '/' + filename), "r")
```

```
    tabright = []
    text = f.readline()
    while text != "3\n":
        tabright.append(int(text))
        text = f.readline()
    text = f.readline()
    tabdown = []
    while text != "end\n":
        tabdown.append(int(text))
        text = f.readline()
    tabdown.pop()
    f.close()
    #print(tabright)
    #print(tabdown)
    roadQuant = len(tabright)
    wingSize = (roadQuant-1)//2
    screen.fill(backgroundColor)
    x = centerCoords[0] - carHeight*wingSize
    startingY = centerCoords[1]
    for car in tabright:
        for y in range(carHeight):
            for z in range(carHeight):
                screen.set_at((x+z, y+startingY), carColors[car])

        x+=carHeight
    x = centerCoords[0]
    startingY = centerCoords[1] - carHeight*wingSize
    #print(y)
    for car in tabdown:
        #print(carColors[car])
        for yFill in range(carHeight):
            for z in range(carHeight):
                screen.set_at((x+z, yFill+startingY), carColors[car])
        startingY+=carHeight
    pygame.display.flip()
    time.sleep(pausetime)

```