

**Due Date:** Friday, 24 December 2023, @23:59 pm (midnight)

This assignment is for undergraduate students only. In this assignment you will be asked to **write a script** using AutoHotkey framework.

AutoHotkey (AHK) is a free, open-source scripting language designed for automating the Windows GUI (Graphical User Interface) and general scripting. With AutoHotkey, you can create custom scripts to automate repetitive tasks, remap keys, create macros, and perform various other automation functions on your Windows computer.

The target application will be a 32-bit windows application called “Ford.exe”. This application generates radio codes for vehicles produced by the Ford Motor Company. Figure 1 shows the user interface of the application.



Figure 1 User interface.

You script must:

- Execute this application (Ford.exe) from the current folder.
- Enter a 6-digit serial number (e.g. 123456) starting with the **startserialnumber**.
- Then press the “**button number 5**” to obtain the **CODE** as seen in Figure 2.



Figure 2 Serial number and code

- After that you will crop the region of interest (ROI) represented by the red rectangle region in Figure 2 by using screenshot-cmd. You can obtain it from <https://code.google.com/archive/p/screenshot-cmd/>. It's your responsibility to find out the correct crop parameters.
- Your app will create a directory with your groupname (e.g. Group05) and store the cropped file with the associated serial number. For example, if the serial number is 123456, then the filename must be “123456.png”. This file is created under the folder Group05 (if you are

group 5 😊 , if you are group 12 then it is Group12 without leading zero)

- Inside the Group folder, all the serial number from **startserialnumber** to **finishserialnumber** will be present as shown in Figure 3.

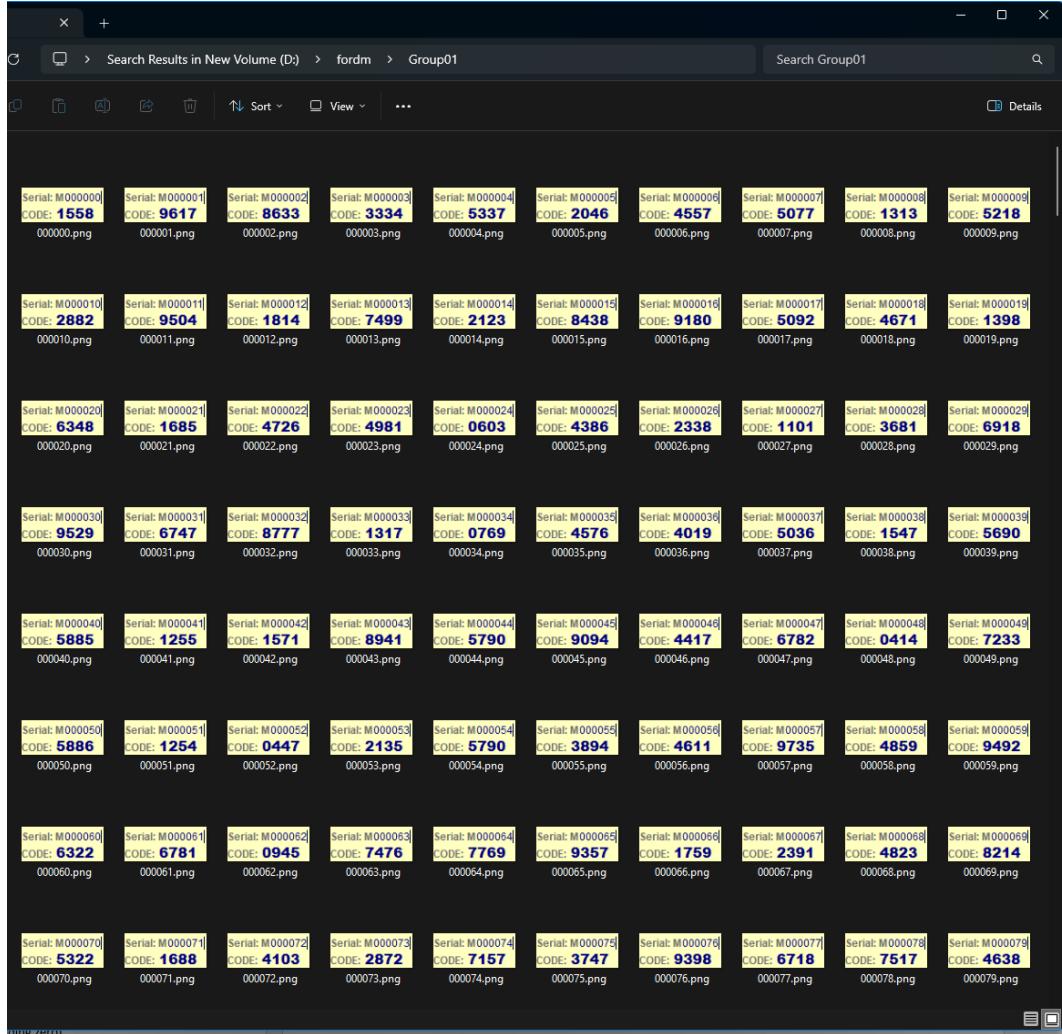


Figure 3 Example group folder content for serial numbers from 0 to 79

## Submission:

You should send your ahk file as “GroupXX.ahk” where XX is your group number.  
**Those who submit their homework late will be penalized 10 points per day.**

## Rules:

- Upload your ahk file to MS Teams.