

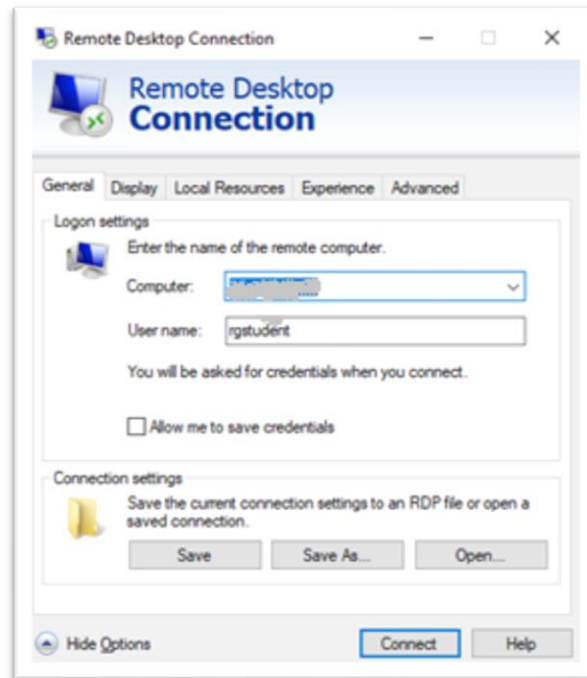
## RG STEM CLUB: SELF DRIVING CAR – GRAND PRIX

NAME:

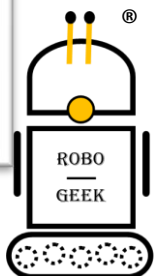
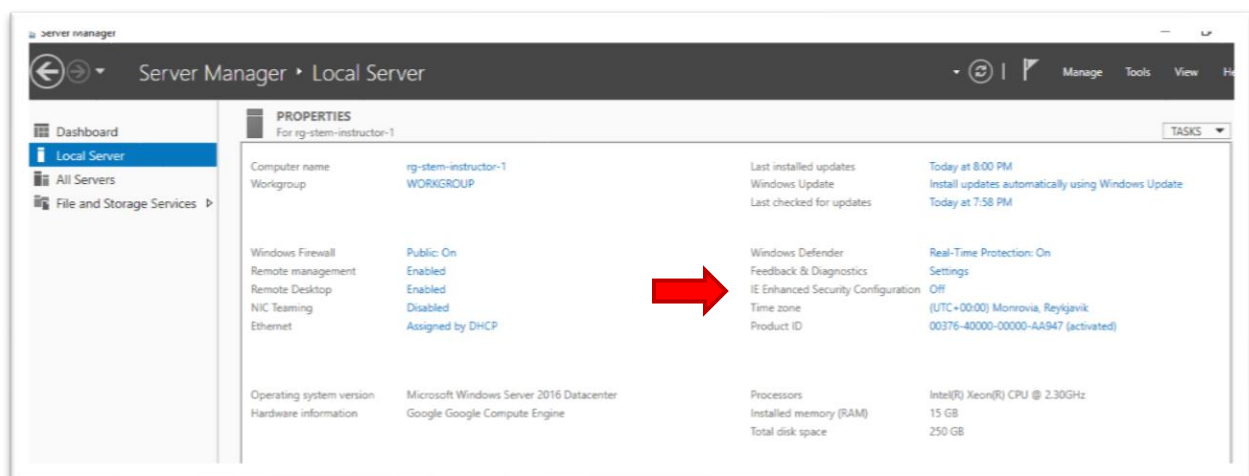
DATE:

### Lab 1: Learn how to Install Project

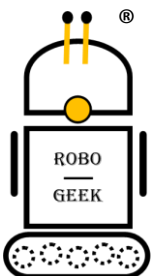
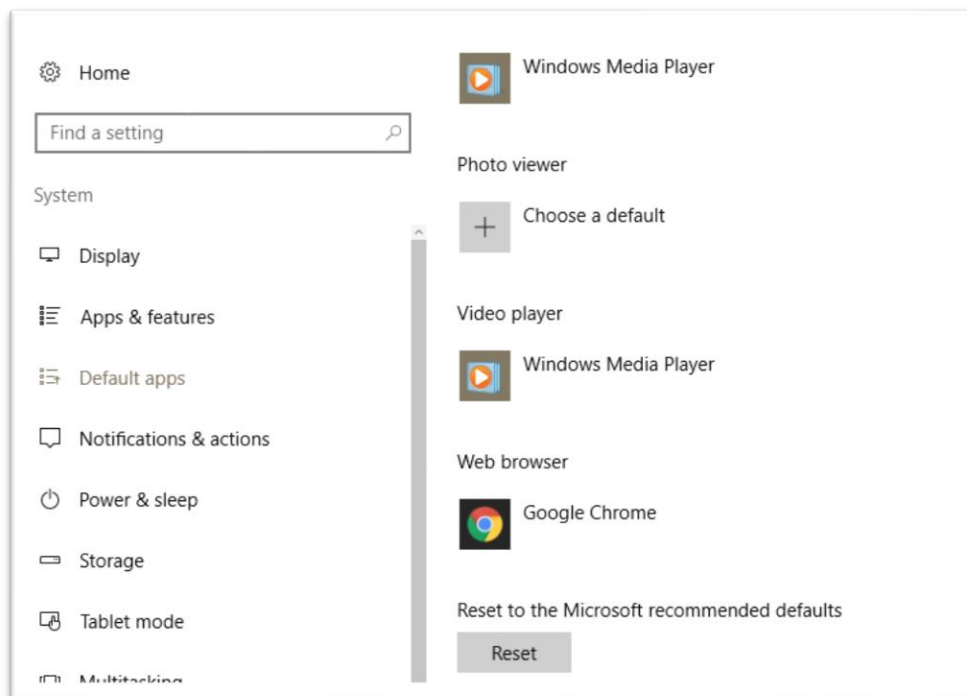
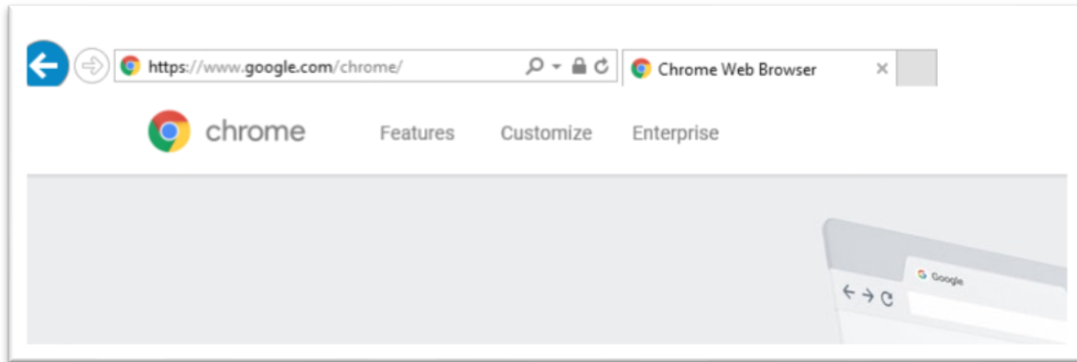
1. Connect to **Remote Desktop Connection**, enter the assigned IP address, User Name and Password



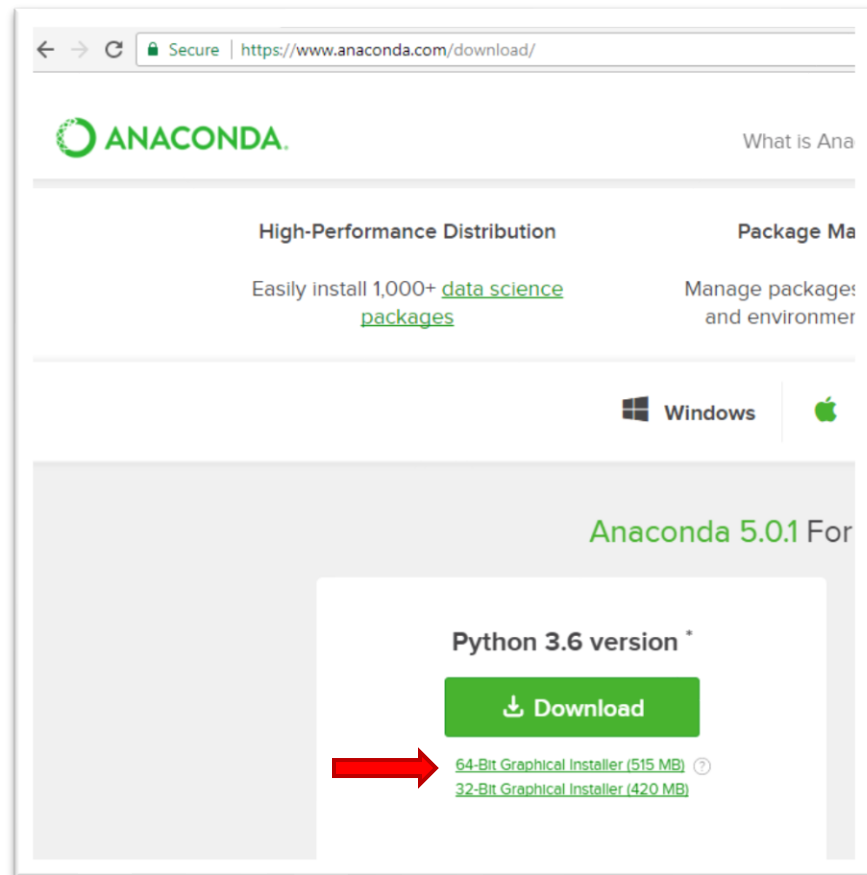
2. Go to **Server Manager**, select **Local Server** and turn off settings in **IT Enhance Configuration**



### 3. Install Google **Chrome** and set up as default browser and pin to task bar

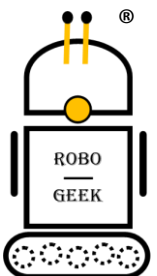
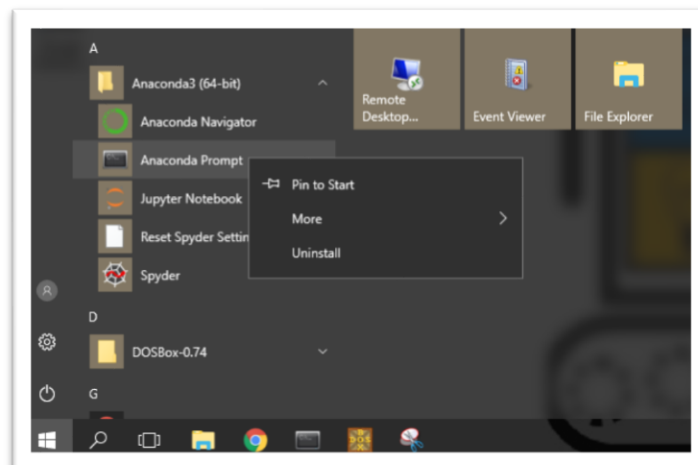


## 4a. Google Anaconda Download - download Python 3.6 version 64 bits

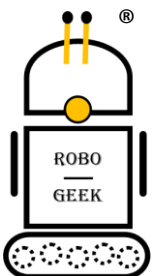
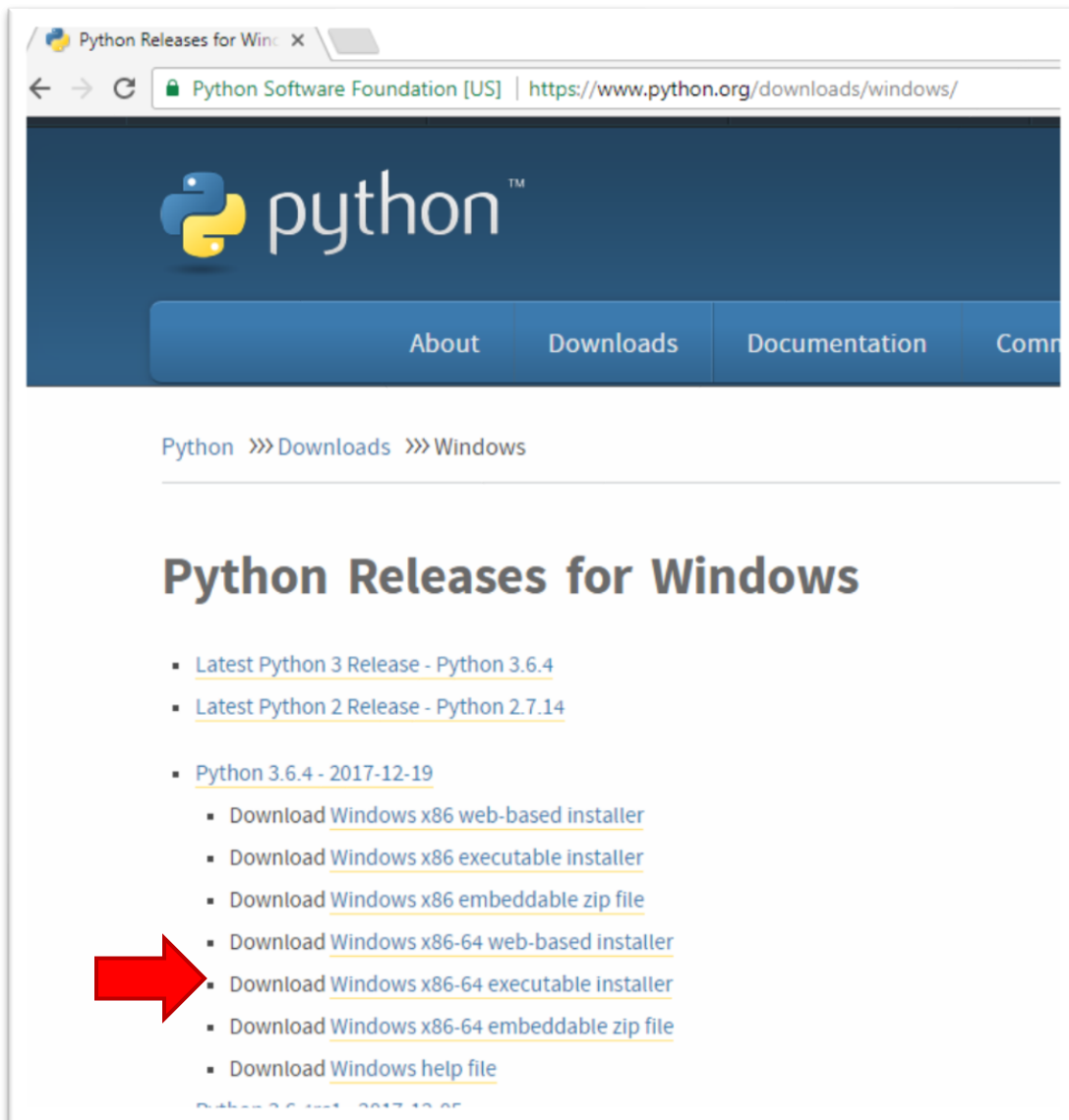


## 4b. Install for all users - select PATH option - ignore warning. Installation may take several minutes.

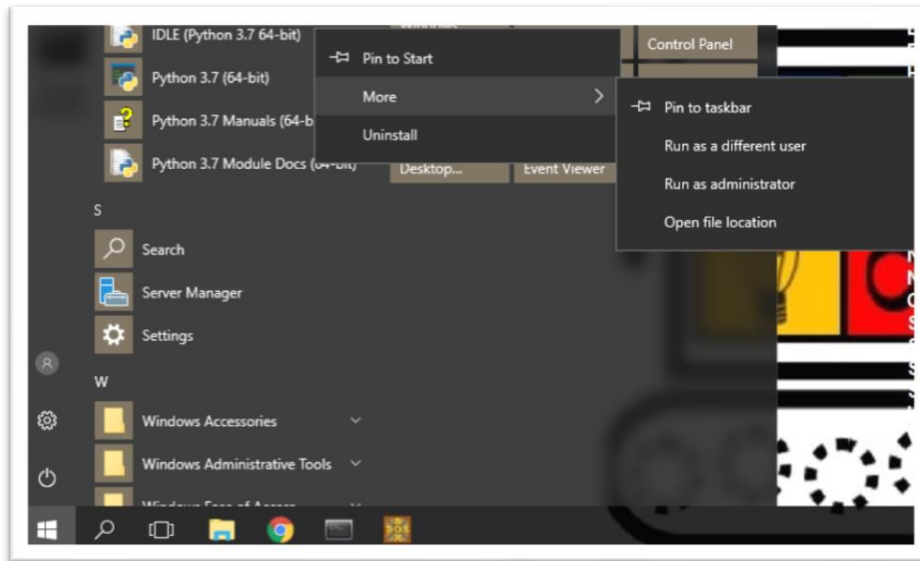
## 4c. Once Anaconda is installed, pin **Conda Prompt** to taskbar



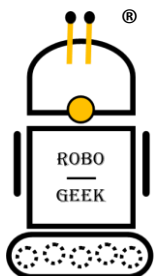
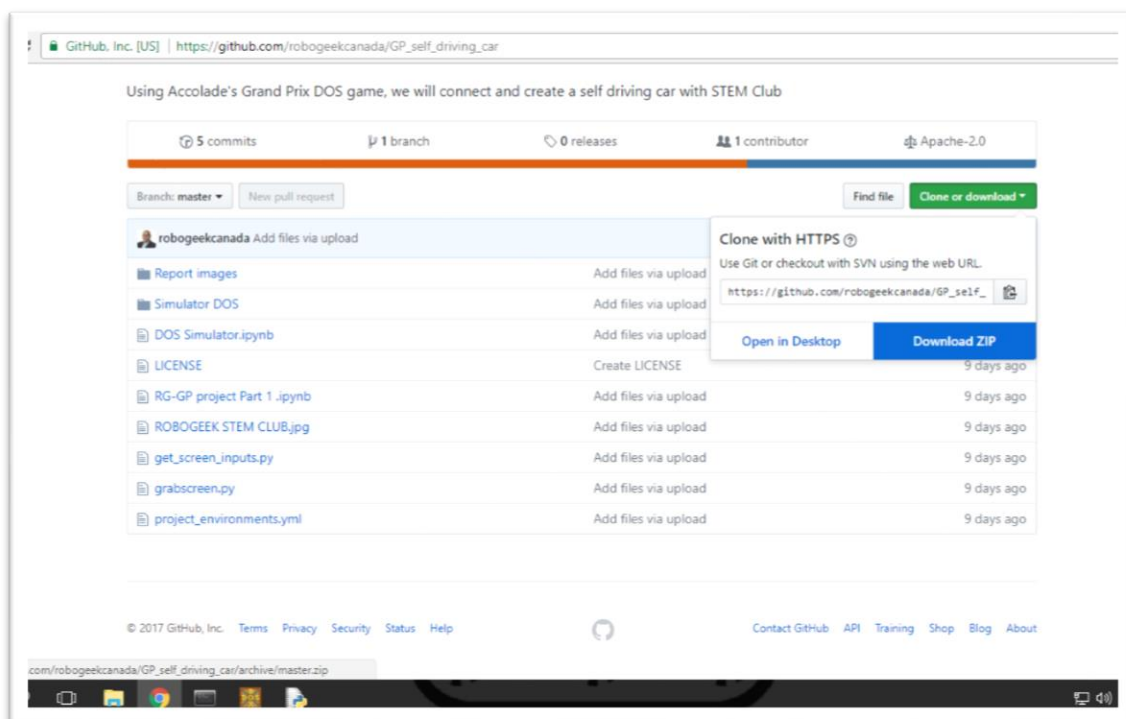
5a. Google Python Windows Install, select Python 3.7, 64 bits, executable



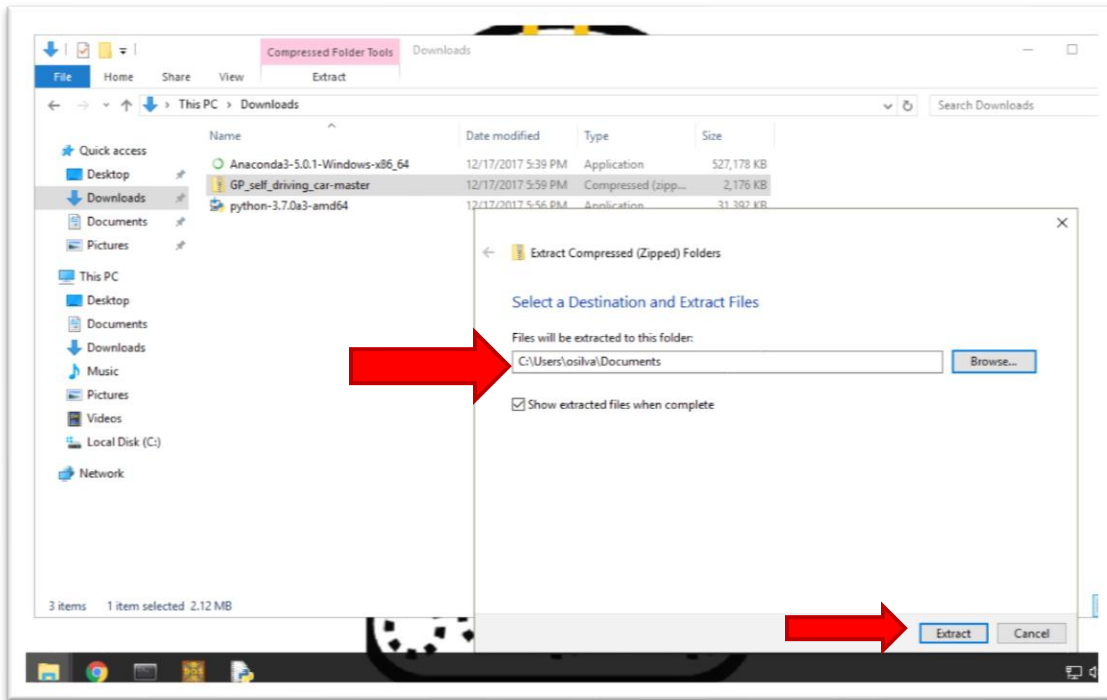
5b. Once Python is installed, pin to task bar - Python IDLE



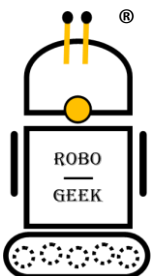
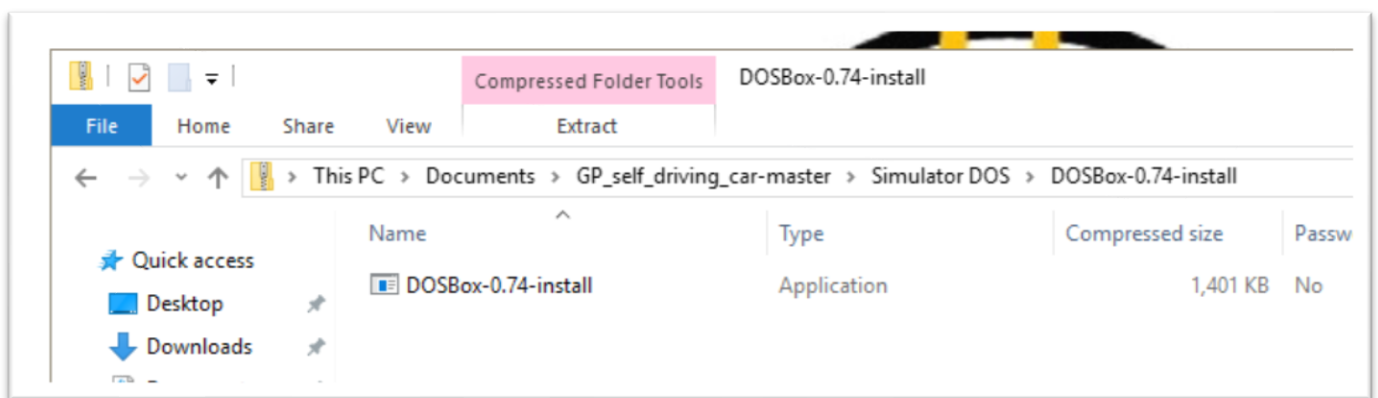
6a. Go to [https://github.com/robogeekcanada/GP\\_self\\_driving\\_car](https://github.com/robogeekcanada/GP_self_driving_car) and select GP\_self\_driving\_car repository and clone (zip)



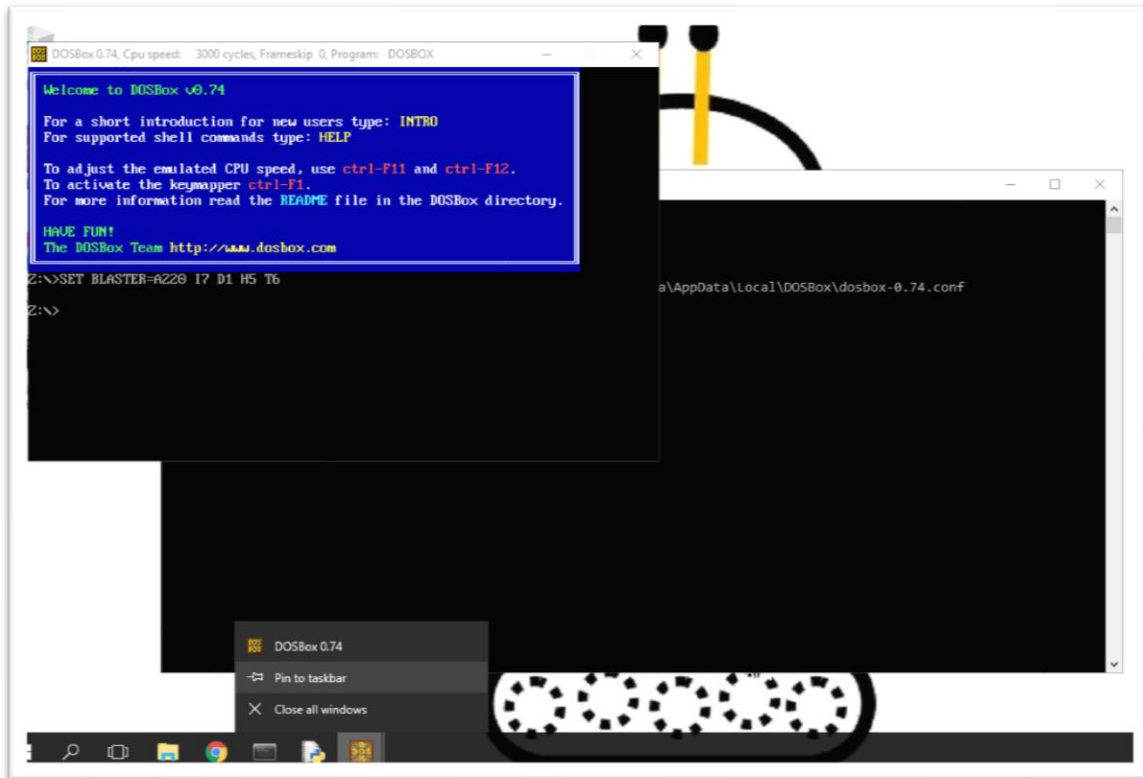
6b. Unzip GP\_self\_driving\_car-master in Documents folder by right clicking on the zip file and select Extract All, then select Documents folder after clicking on the Browse button.



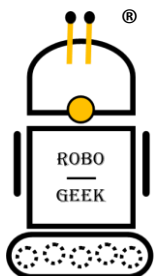
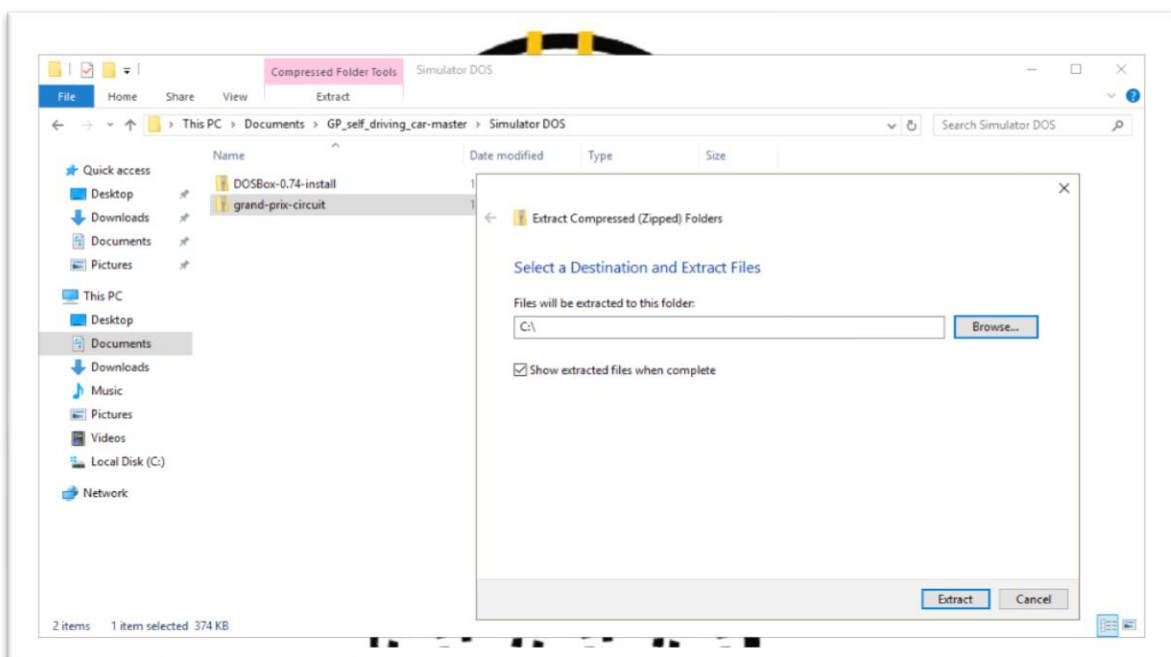
7a. Go to Documents\GP\_self\_driving\_car-master\Simulator DOS and install DOS BOX by clicking on **DOSBox-0.74-install**



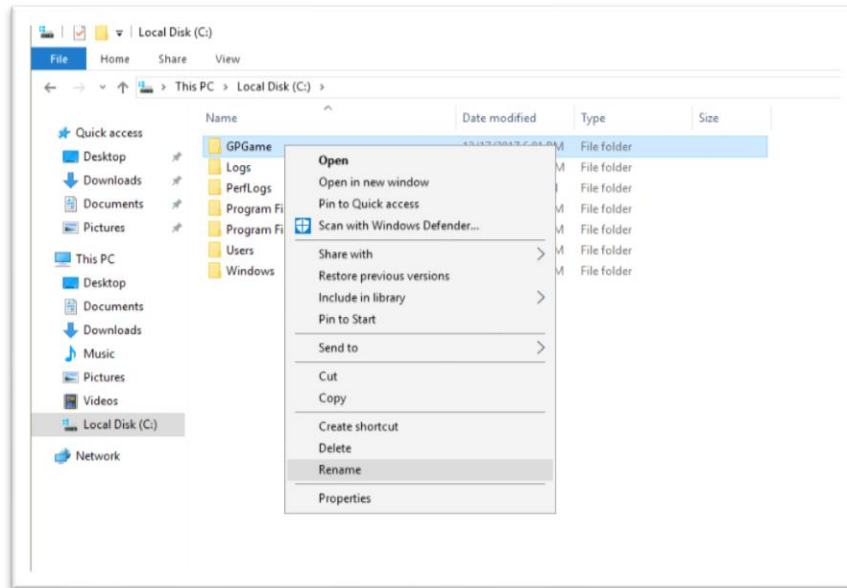
## 7b. Pin **DOS BOX** to taskbar



## 8a. Unzip grand-prix-circuit in C:\



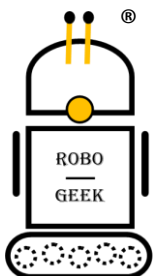
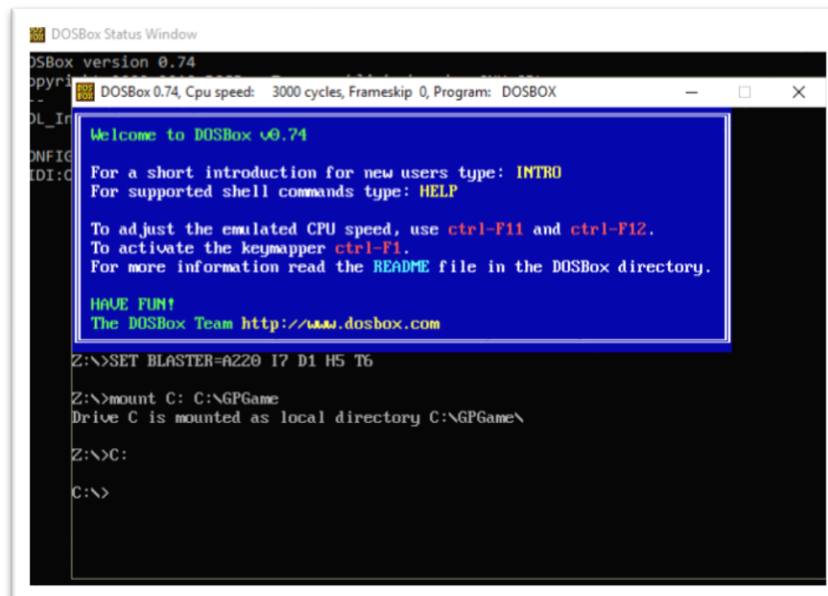
## 8b. Rename folder to GPGame



## 9a. In DOS Box

> mount C: C:\GPGame

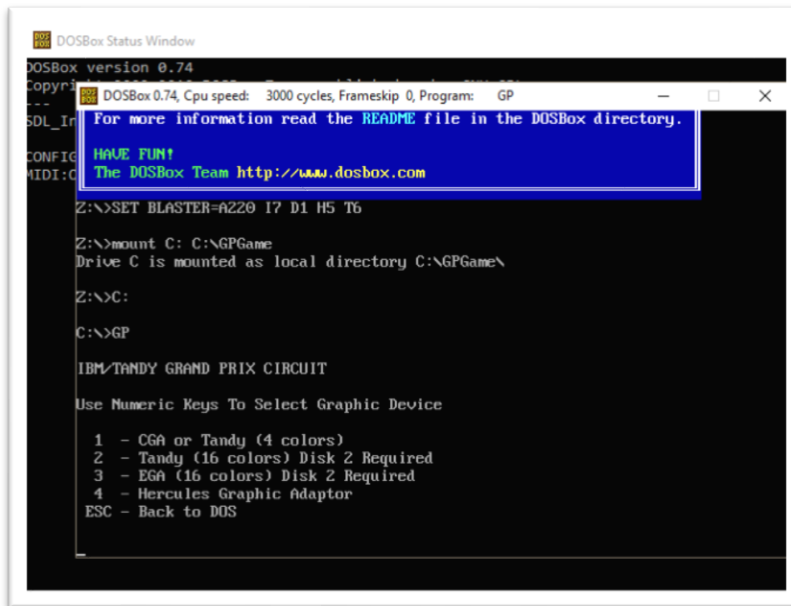
> C:





9b. Select 3 EGA (16 colors) and follow instructions to play game

> GP



```

DOSBox Status Window
DOSBox version 0.74
Cpu speed: 3000 cycles, Frameskip 0, Program: GP
For more information read the README file in the DOSBox directory.
HAVE FUN!
The DOSBox Team http://www.dosbox.com

Z:\>SET BLASTER=A220 I7 D1 H5 T6

Z:\>mount C: C:\GPGame
Drive C is mounted as local directory C:\GPGame\

Z:\>C:
C:\>GP

IBM/TANDY GRAND PRIX CIRCUIT

Use Numeric Keys To Select Graphic Device

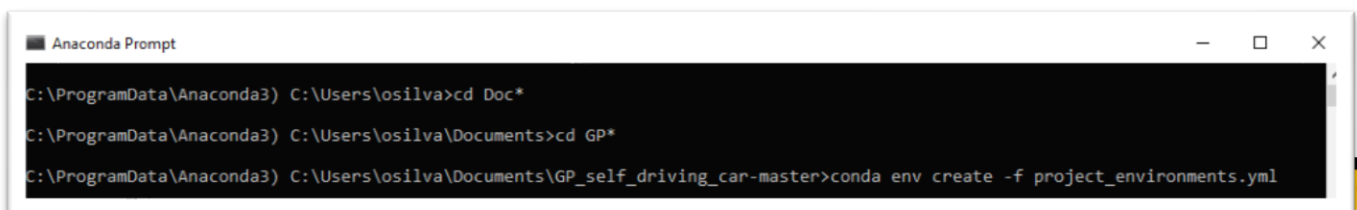
1 - CGA or Tandy (4 colors)
2 - Tandy (16 colors) Disk 2 Required
3 - EGA (16 colors) Disk 2 Required
4 - Hercules Graphic Adaptor
ESC - Back to DOS
  
```

10a. Go to Conda Prompt to create environment:

> cd Doc\*

> cd GP\*

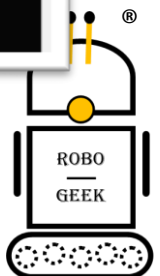
> conda env create -f project\_environments.yml



```

Anaconda Prompt
C:\ProgramData\Anaconda3 C:\Users\osilva>cd Doc*
C:\ProgramData\Anaconda3 C:\Users\osilva\Documents>cd GP*
C:\ProgramData\Anaconda3 C:\Users\osilva\Documents\GP_self_driving_car-master>conda env create -f project_environments.yml
  
```

This is step may take several minutes, reply Yes to installation questions.



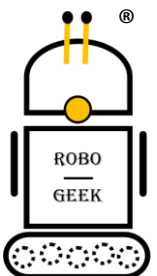
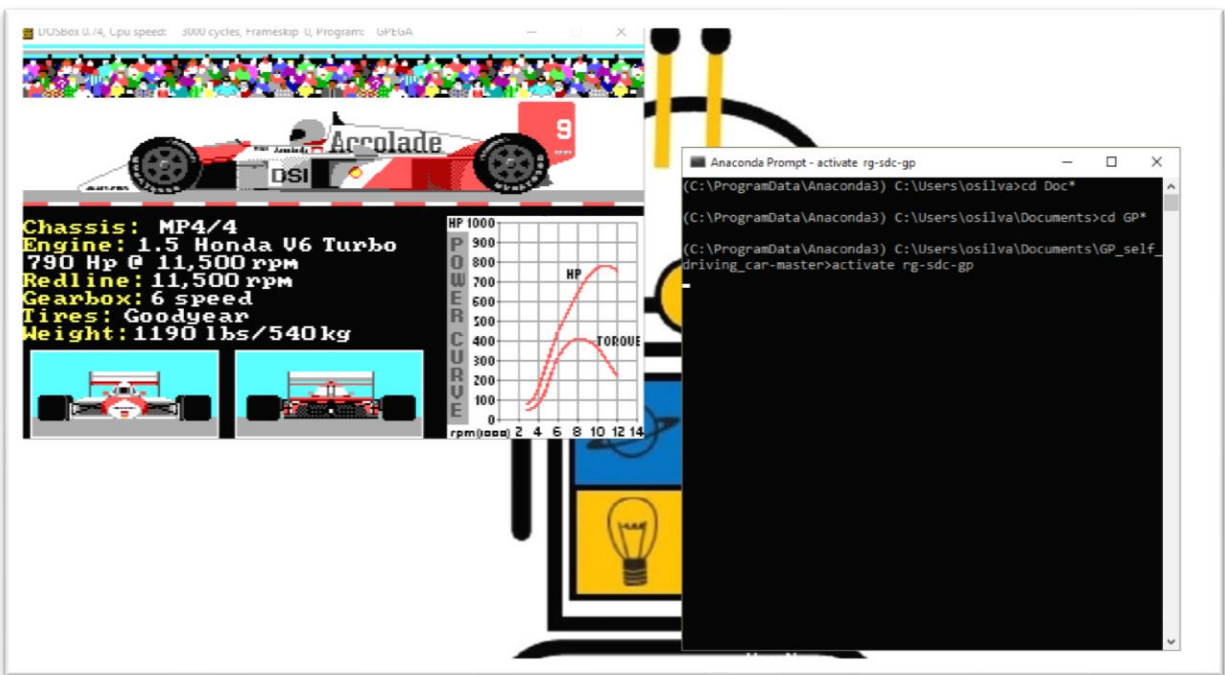
11. Continue installation of project. Activate Environment by entering the following command:

```
> activate rg-sdc-gp
```

12. Finally install missing package pywin32. This step may take several min

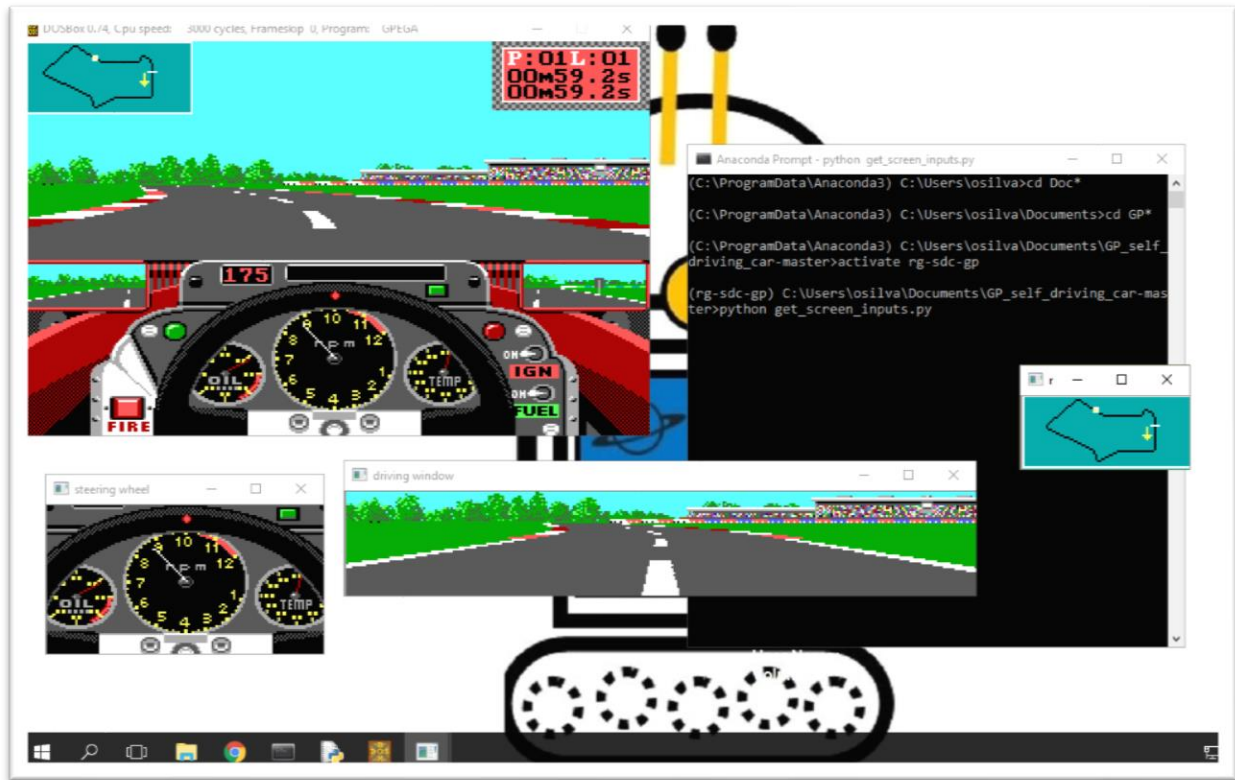
```
> conda install -c anaconda pywin32
```

13. Test program. Place the Grand prix screen in the top left corner of the screen. Minimize all other screens except Conda Prompt (change size of the screen so you can see both side to side)



14. Then run Python program get\_screen\_inputs.py.

> python get\_screen\_inputs.py



- Place the new screens away from the game screen.

