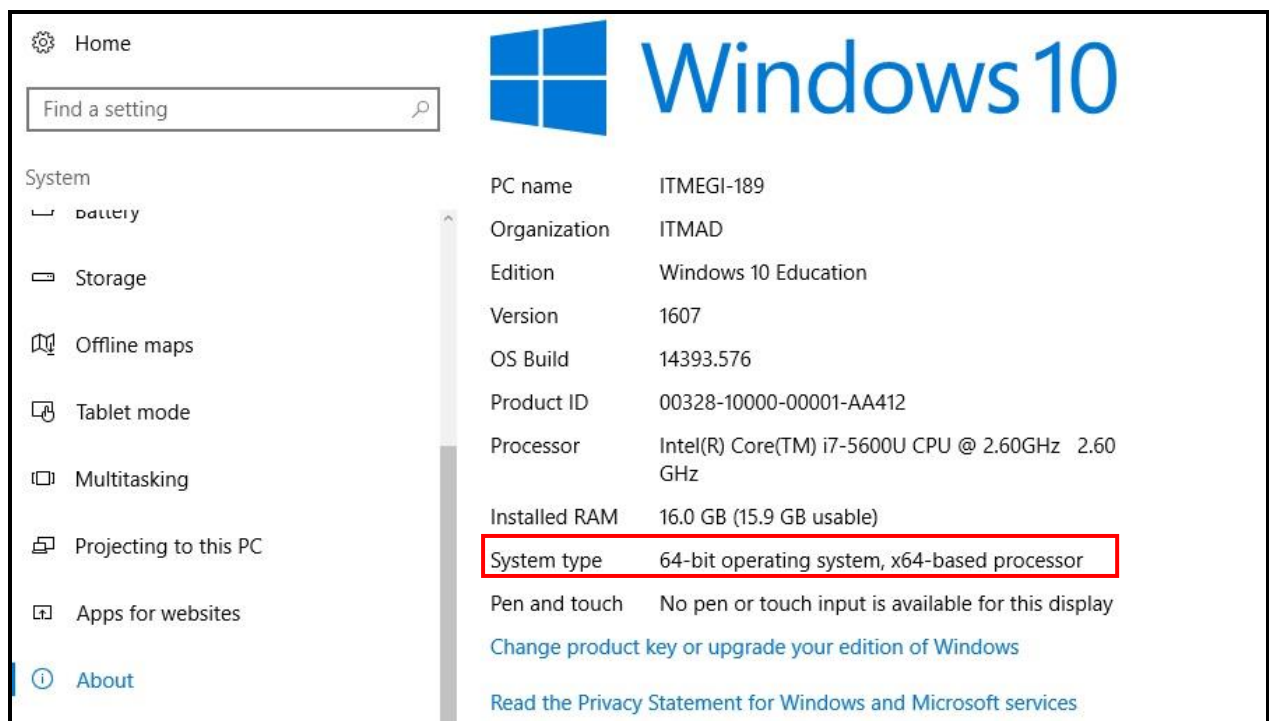# GLPK installation guide for windows 10 users

Disclaimer: *This instruction sheet is prepared for the training sessions on **MoManI**. In order to be able to use this effectively, you will need to have a computer with windows 10 as operating system and to have full administrative rights to be able to install and add new files to your system.*

Instructions:

1) First of all, you need to know the what is the type of your windows operating system. To check that, navigate to: ***Control panel >> System >> About***
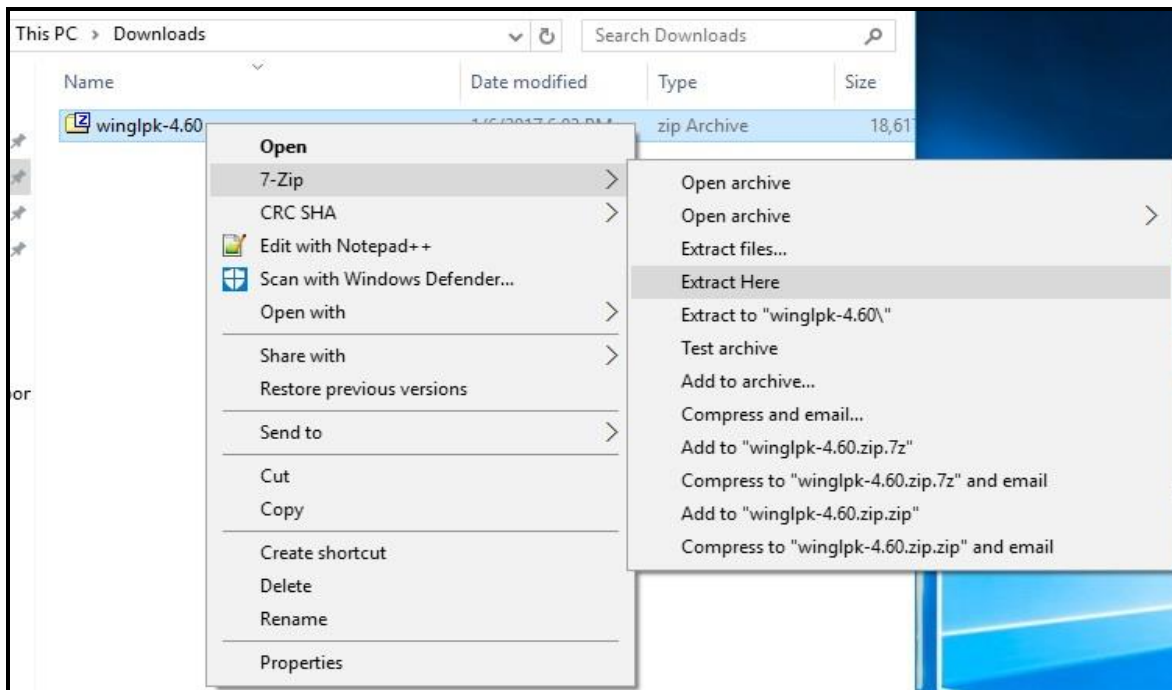

2) Download the latest version of GLPK solver (**glpk-4.60.tar.gz**) from the following link:

https://sourceforge.net/projects/winglpk/

This will download a zip file in your '***downloads***' folder.

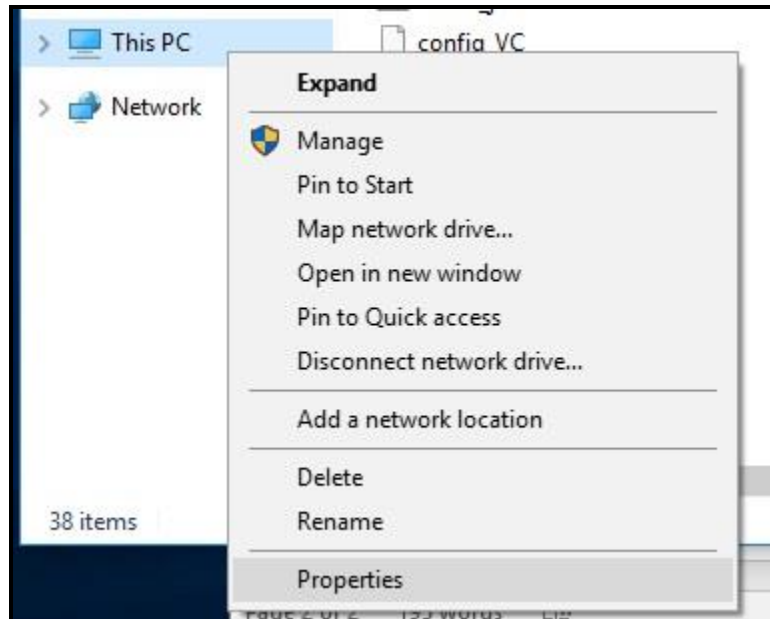3) Extract the Zip folder by: ***right clicking on the folder and then>> 7-Zip >> Extract Here*** as shown below:

4) Now you will see a new folder called (**glpk-4.60**), move this folder to your (**C:**) Drive or any other folder you want the solver to be saved in. (*Hint: You may need to log in as administrator to be able to add a file to your C: drive.*)

By this you have the solver installed in your computer, you **DO NOT** need to click install or run any executable. The only thing we need to be able to use the solver, is to set the environmental path variable. Which we will show in the following steps.
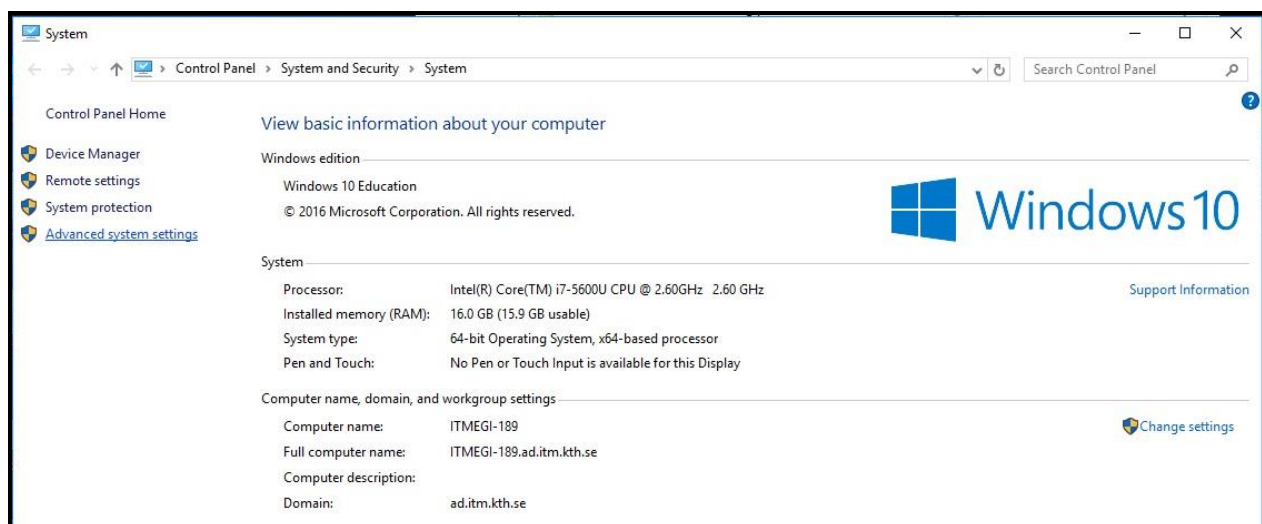
5) Double click on (**glpk-4.60**) folder, you should find many folders and files and among them you can find two folders (**w32**) and (**w64**).
6) Based on the operating system type (step 1), open the (w32) folder if you have a 32-bit operating system or open (w64) if you have a 64-bit operating system. In this case we have 64-bit operating system and we open (w64).
7) From the address bar, **COPY** the directory to this folder (**C:\glpk-4.60\w64**) as shown below:

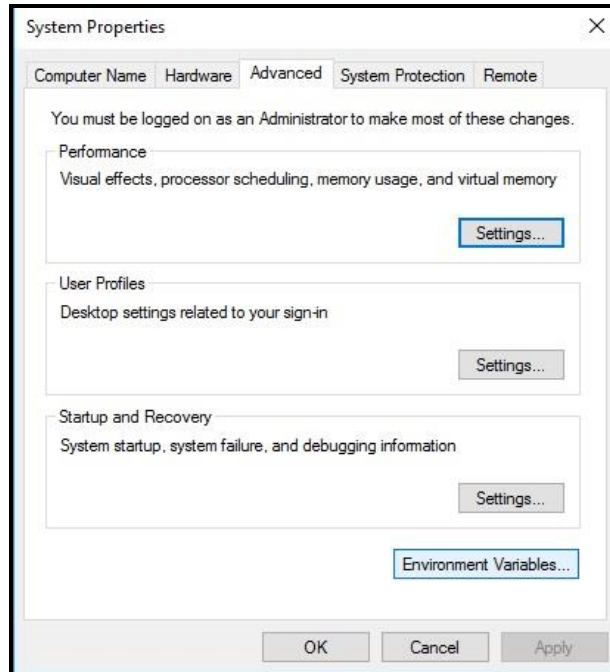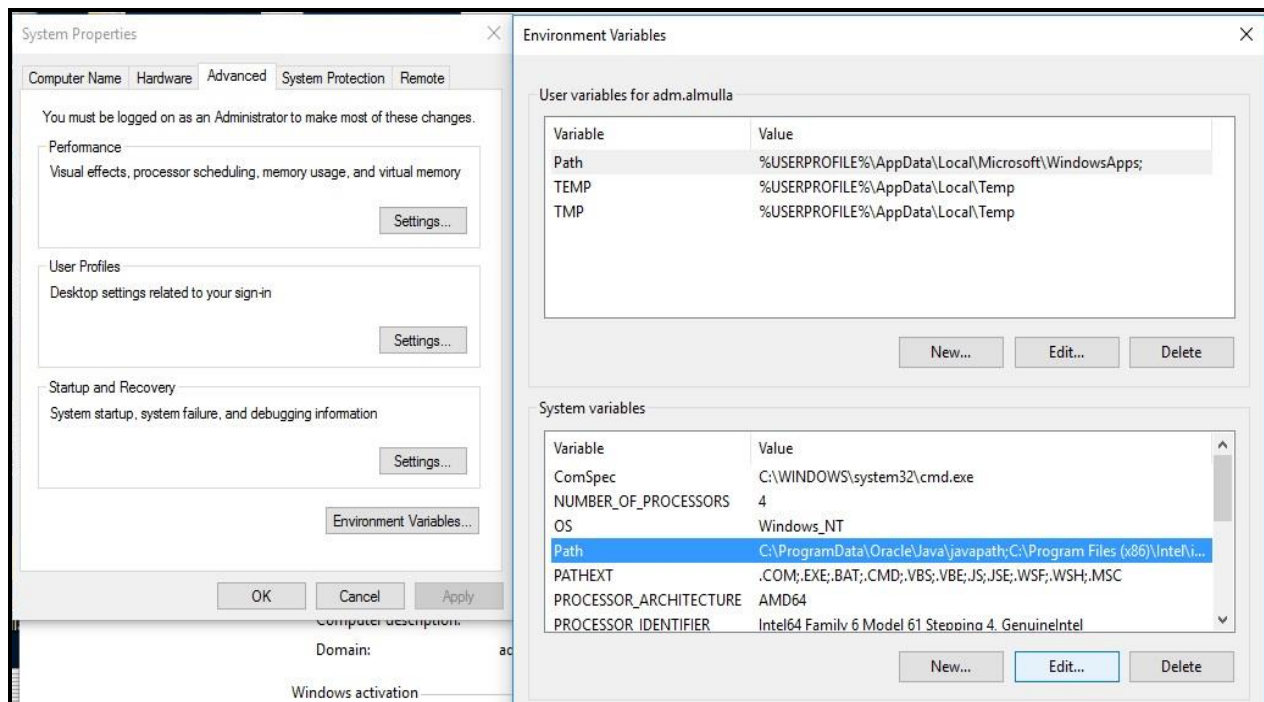8) On the right side of the browsing windows, right click on (**This PC**) and select (**Properties**):

9) This will open a new window, on the right side menu, click on (**Advanced System Settings**)

10) On this new window, click on (**Environmental Variable**) option at the bottom
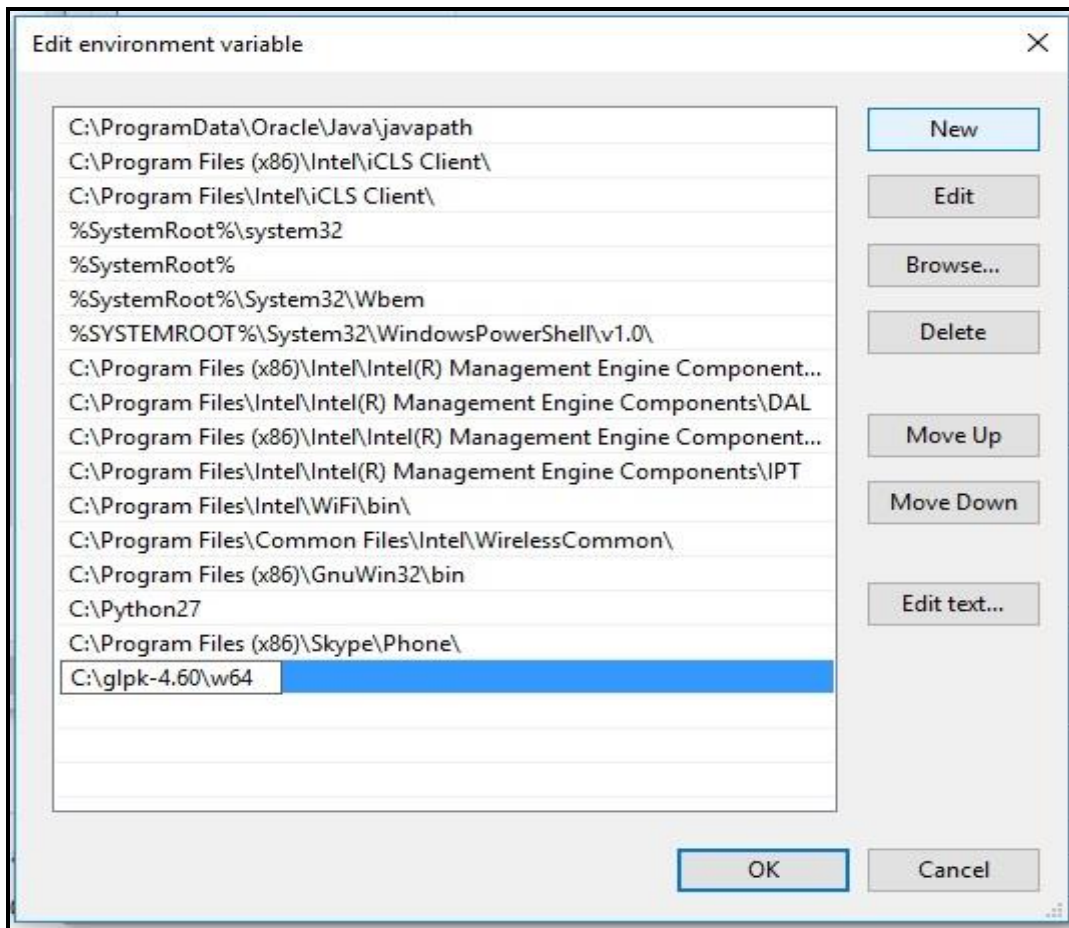
11) Again you will have a new window. From bottom list, select (**Path**) and then click on (**Edit**) as shown below:

12) This will lead you to a new window with a list of all path variable defined in your computer, click on (**New**) to be able to add a new path variable to GLPK solver.

13) In the bottom field, paste the directory to GLPK (**'C:\glpk-4.60\w64'**, which we have copied in step 7):

Finally click (**OK**) to save your work.

To check if the solver is installed successfully:

1) Open (command prompt) window
2) Type (glpsol)
3) Click enter
4) You should find a msg like the one shown below: (**GLPSOL: GLPK LP/MIP Solver, v4-60**):