**M A N U A L**

**OutC4se**

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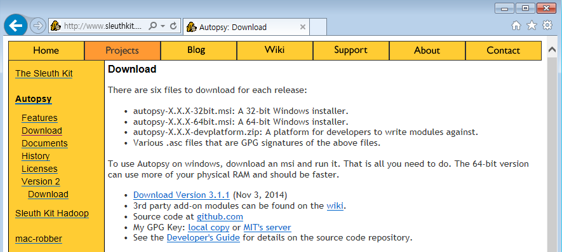
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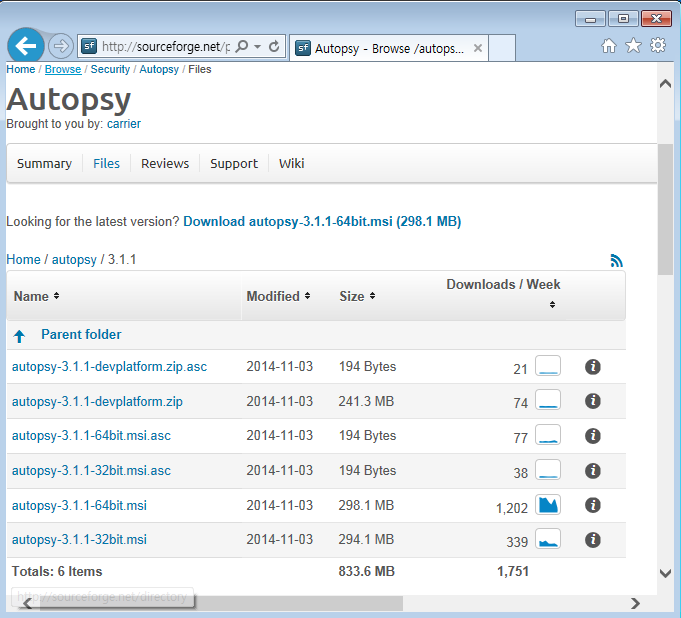
1. Windows
   1. Install
      1. Autopsy

- Download Version 3.1.1

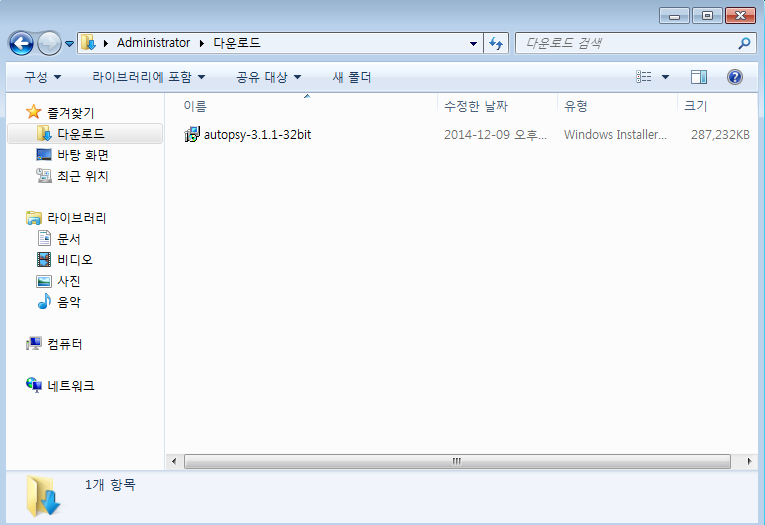


<http://www.sleuthkit.org/autopsy/download.php>

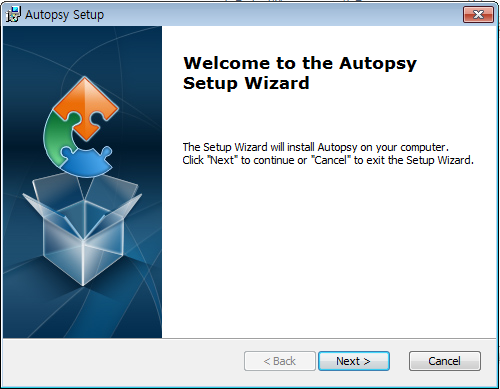
-Install



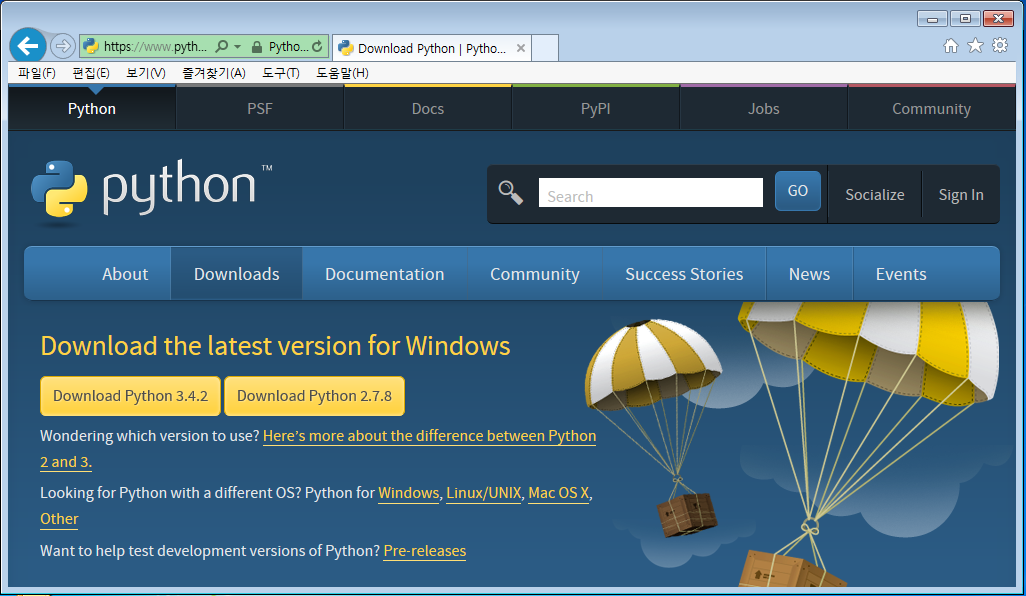
<http://sourceforge.net/projects/autopsy/files/autopsy/3.1.1/>



Next -> Next -> Install -> Finish

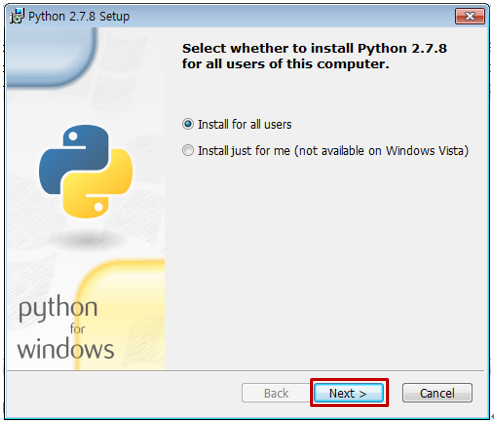


* + 1. Python



<https://www.python.org/downloads/>

Next → Next → Finish



* + 1. Python Module

We made a program by Python, so you have to install some Python modules. You can download those files at the site below, and find the modules you want by Ctrl + F.

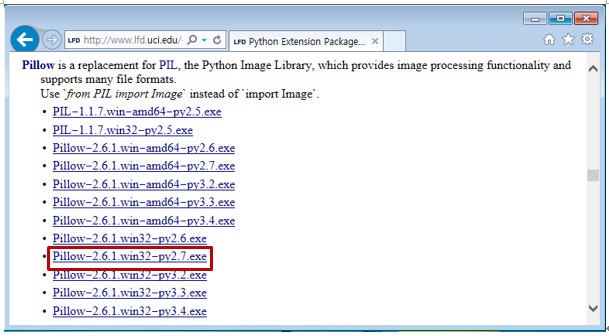
<http://www.lfd.uci.edu/~gohlke/pythonlibs/>



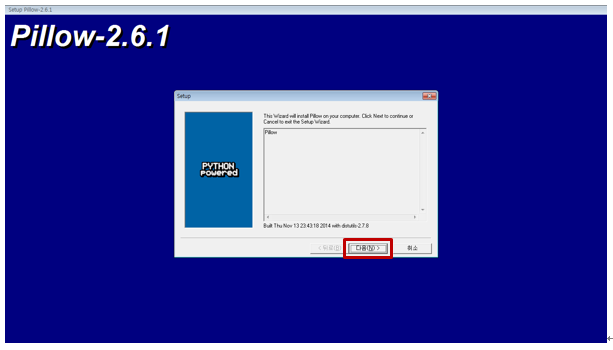
Modules that you have to install.

|  |
| --- |
| pillow / numpy / scipy / scikit-learn / matplotlib / six / python-dateutil / pyparsing |

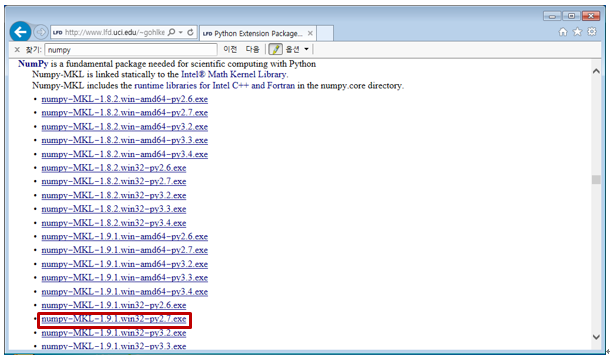
<http://www.lfd.uci.edu/~gohlke/pythonlibs/#pillow>



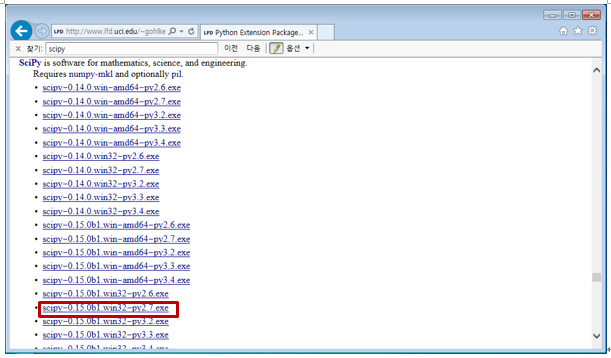
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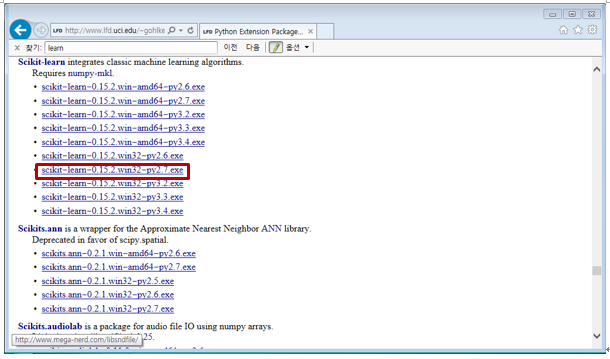
<http://www.lfd.uci.edu/~gohlke/pythonlibs/#numpy>



Next steps of installation is similar with first module

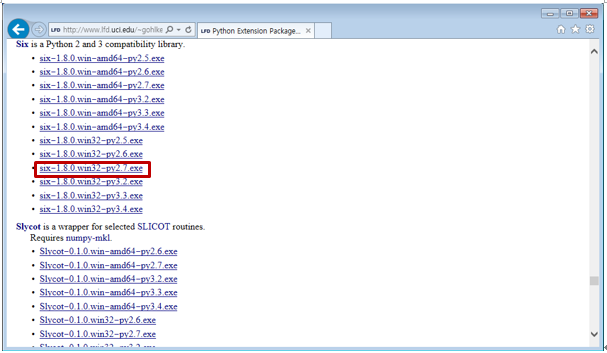
[http://www.lfd.uci.edu/~gohlke/pythonlibs/#scipy](http://www.lfd.uci.edu/~gohlke/pythonlibs/#scipy)

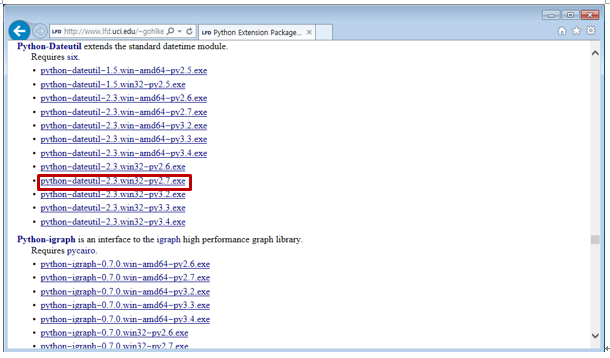
<http://www.lfd.uci.edu/~gohlke/pythonlibs/#scikit-learn>

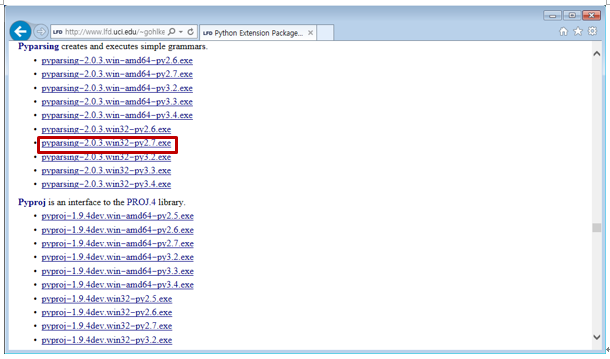


<http://www.lfd.uci.edu/~gohlke/pythonlibs/#matplotlib>

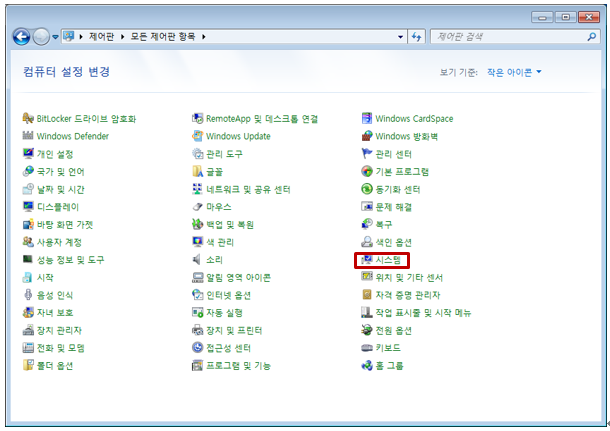


[http://www.lfd.uci.edu/~gohlke/pythonlibs/#six](http://www.lfd.uci.edu/~gohlke/pythonlibs/#six)

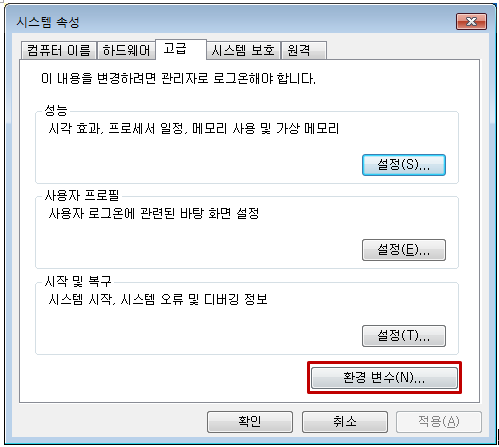
<http://www.lfd.uci.edu/~gohlke/pythonlibs/#python-dateutil>

[http://www.lfd.uci.edu/~gohlke/pythonlibs/#pyparsing](http://www.lfd.uci.edu/~gohlke/pythonlibs/#pyparsing)

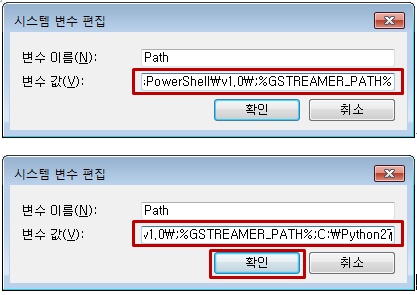
* + 1. Set Environment Variable

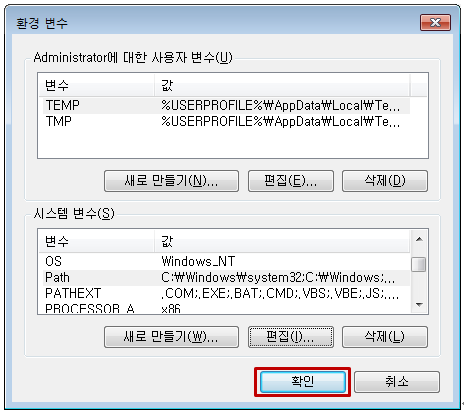






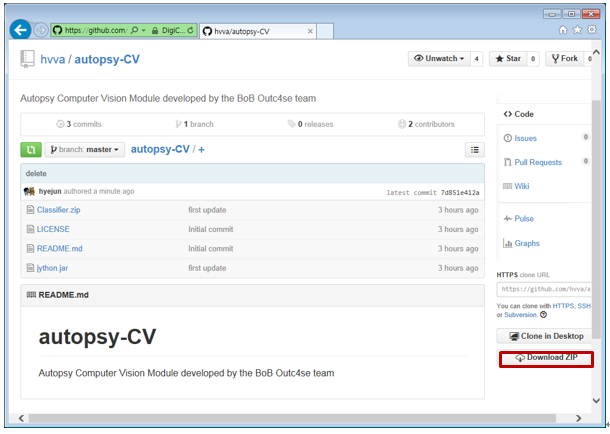




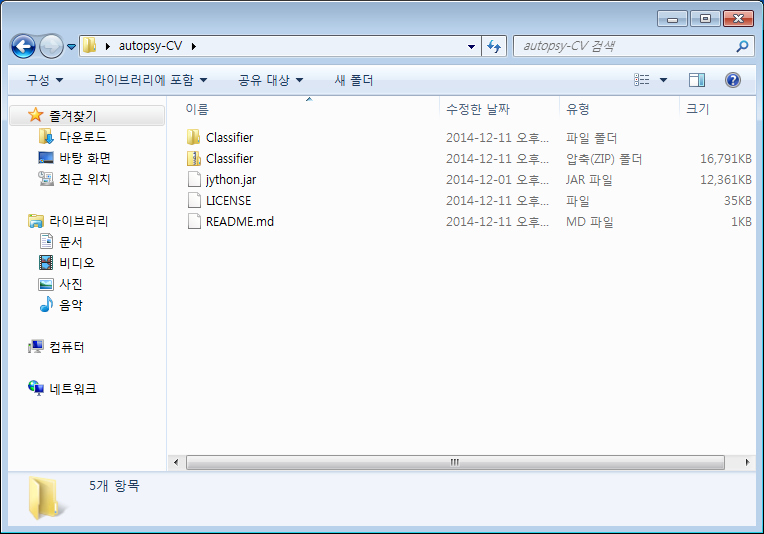


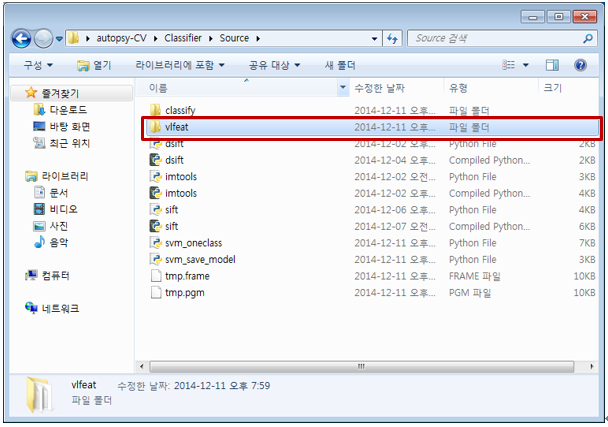
* + 1. Plug-in Module

<https://github.com/hvva/autopsy-CV>

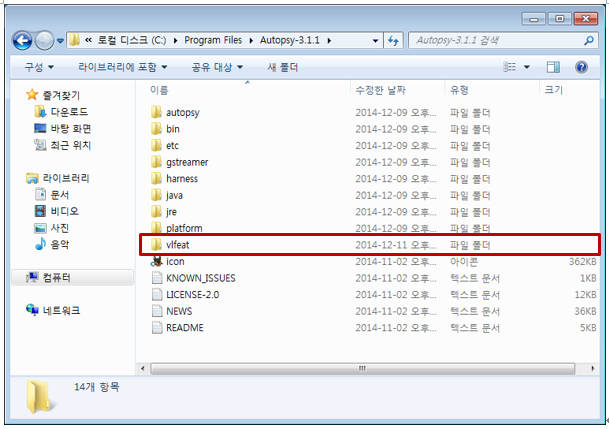


In autopsy-CV folder, move to Classifier – Source and copy the Vlfeat folder.

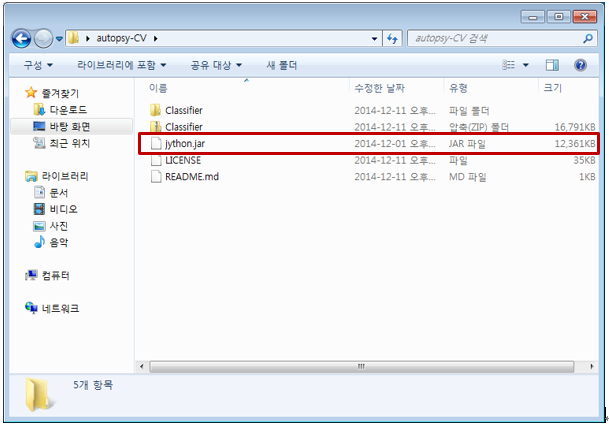




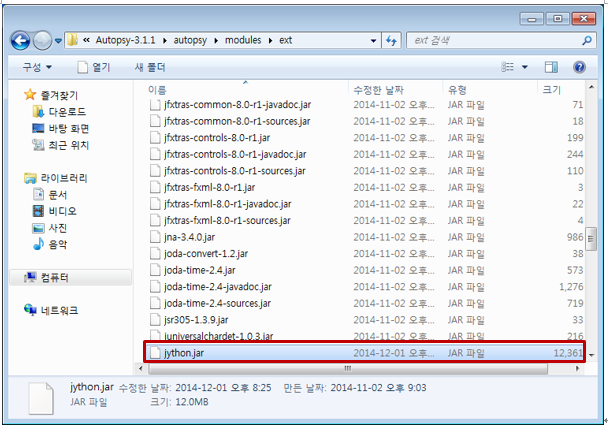
And Paste to Program Files – Autopsy-3.1.1 folder.



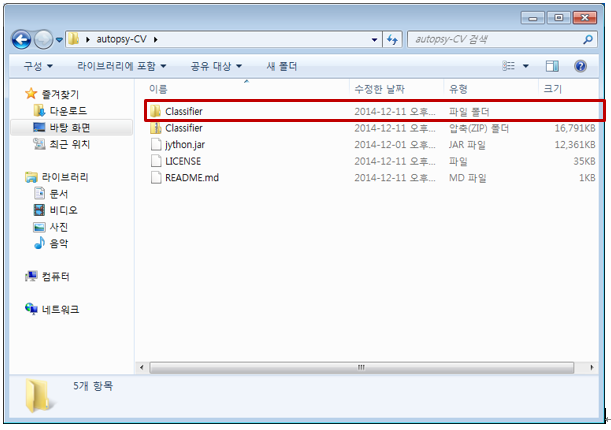
In autopsy-CV folder, copy the jython.jar ,



Paste it to Program Files – Autopsy-3.1.1 – autopsy – modules – ext folder.



Finally, in autopsy-CV folder, copy the Classifier folder,



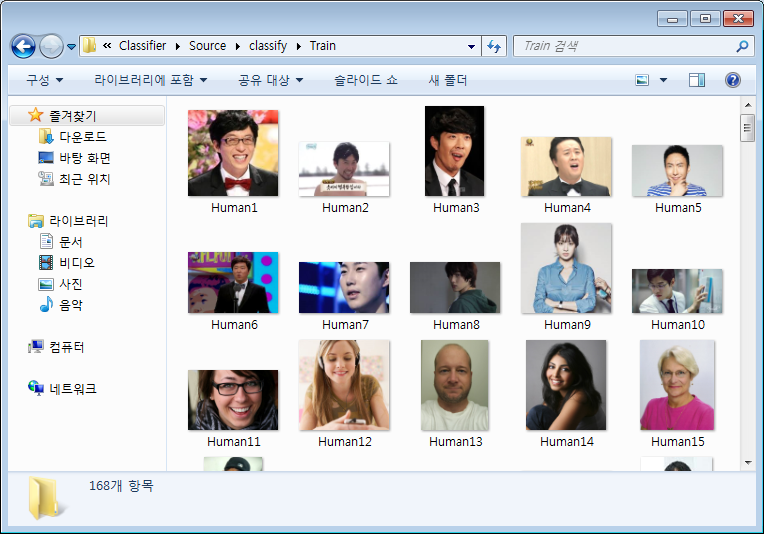
Paste it to

Local Disk(C:) – 사용자 – (사용자이름) – AppData – Roaming – autopsy – python\_modules

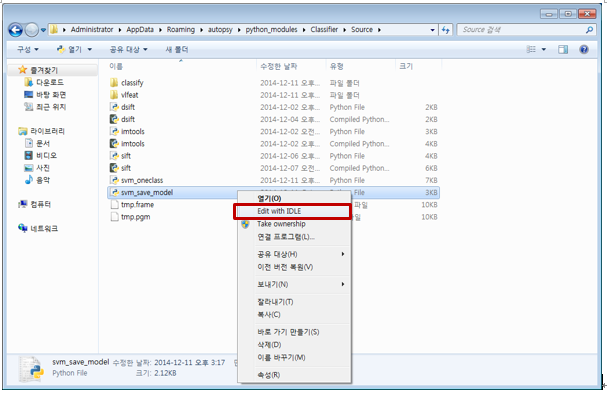


* 1. Operation
     1. Train the Model

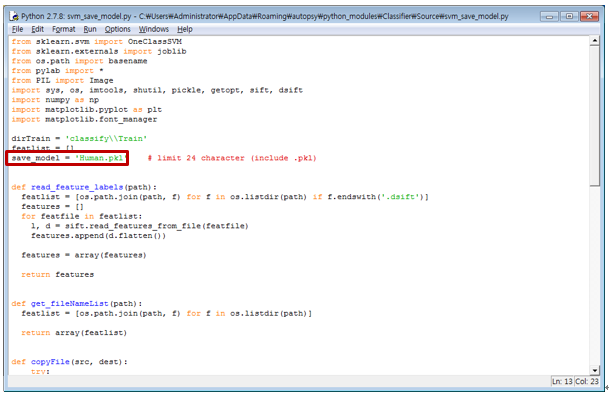
Put the train images to Classifier - Source – classify – Train folder.



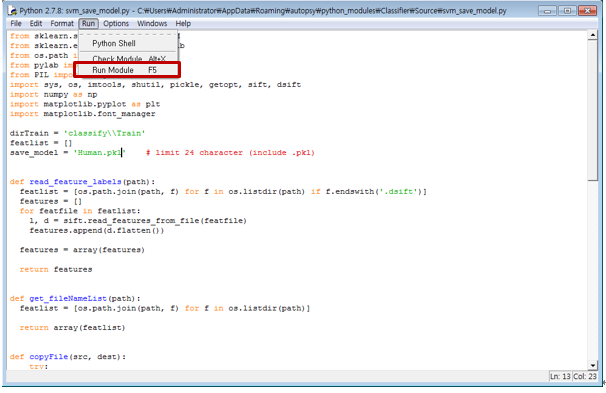
Start the svm\_save\_model.py by IDLE in Classifier – Source folder.



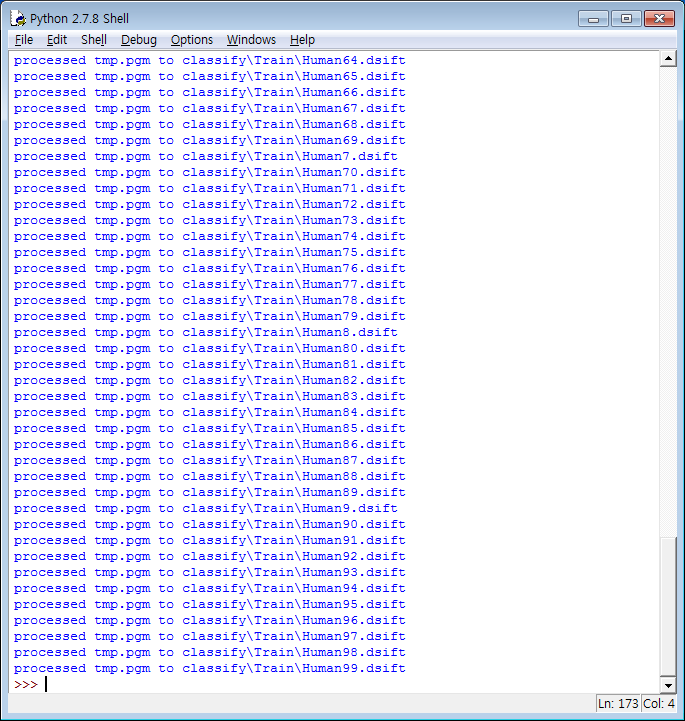
Write the model’s name you want to make in Save\_model variable.



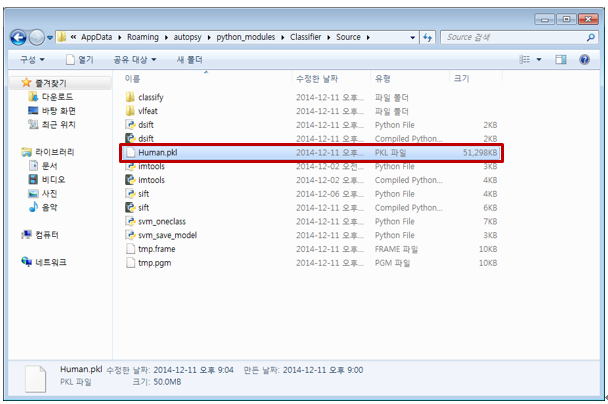
Run – Run Module (F5)



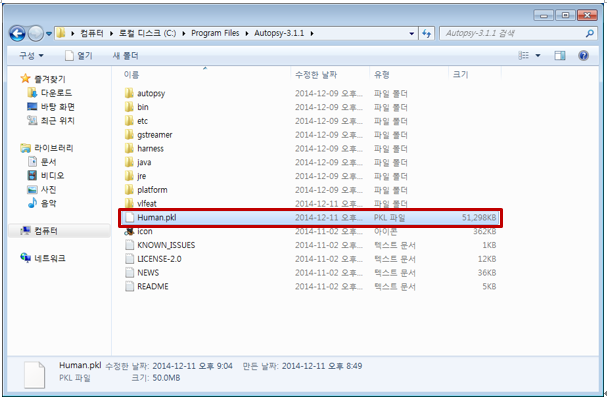
Make the dsift files of the images in Train folder, and train the model by those dsift files.



After the running svm\_save\_model.py is finished, you can check that the Human.pkl is generated in Source folder.

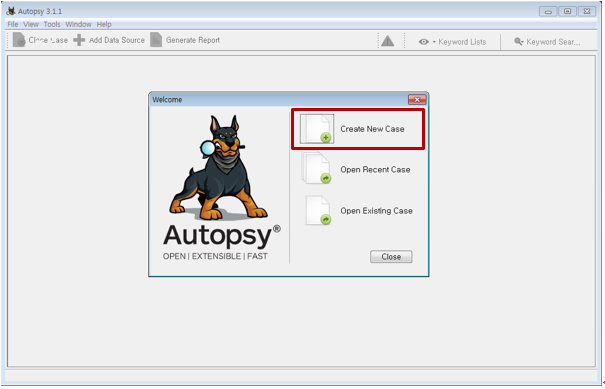


Move the Human.pkl to Local Disk(C:) – Program Files – Autopsy-3.1.1 .

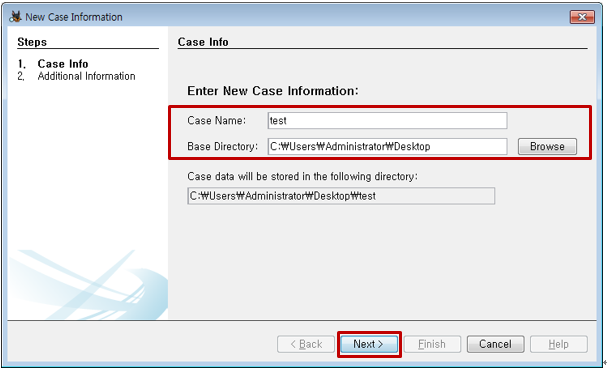


* + 1. Classfy

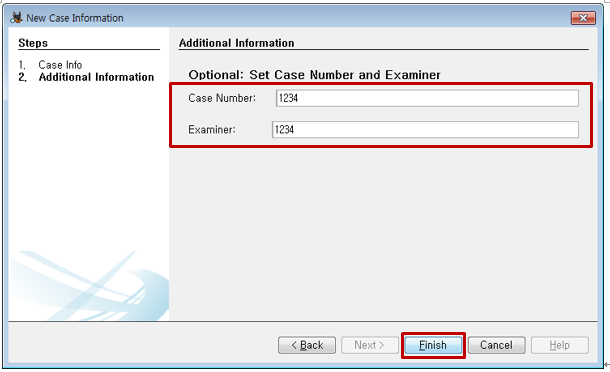
Run the Autopsy.



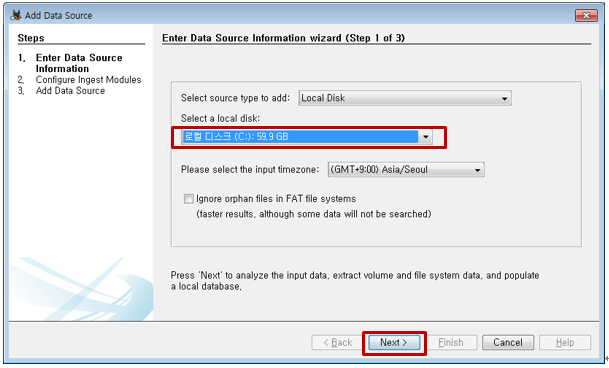
Write the Case Name.



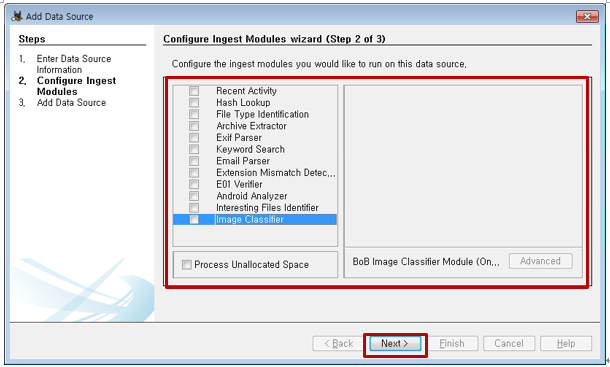
Write the Case Number and Examiner.

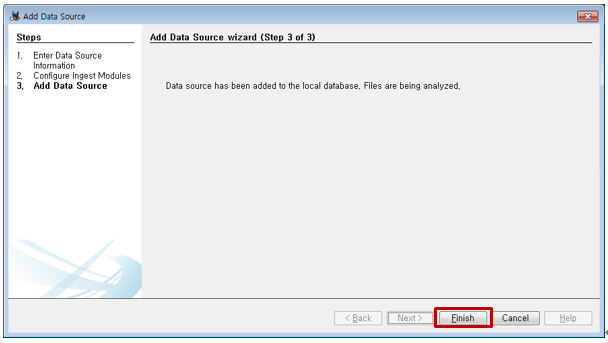


Select the Source type .

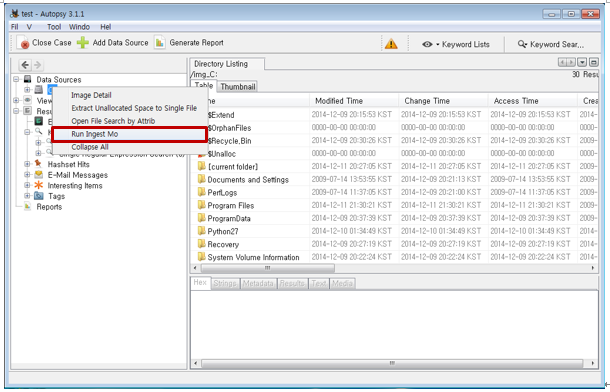


Next - Finish

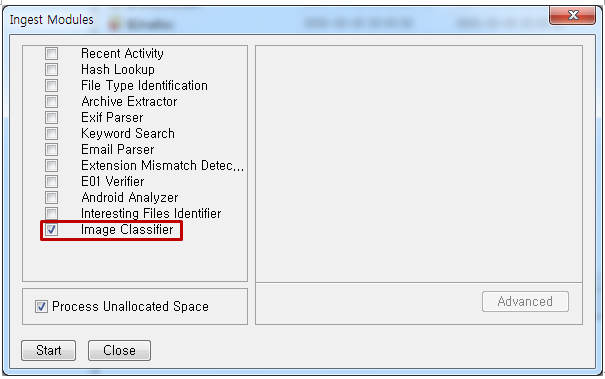




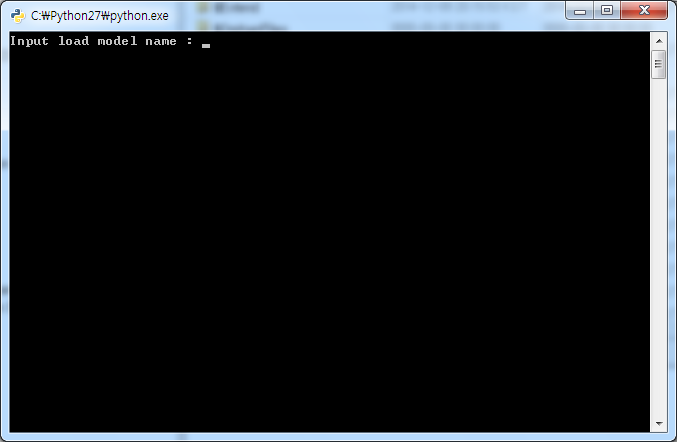
Right-click (C:) and select Run Ingest Module.

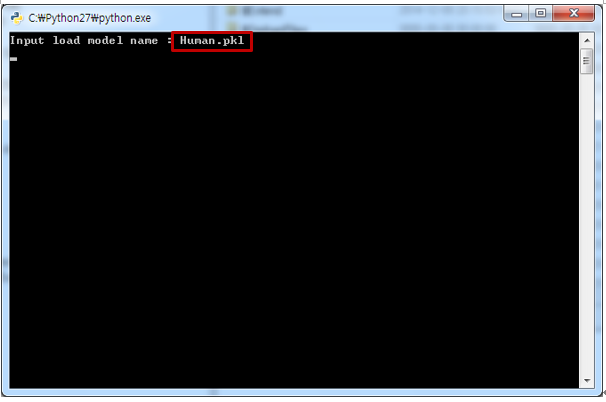


Check Image Classifier.

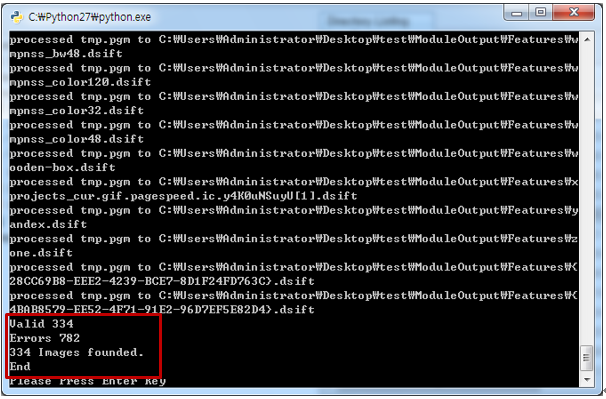


When Cmd windows opened, write the model name that you want to classify.

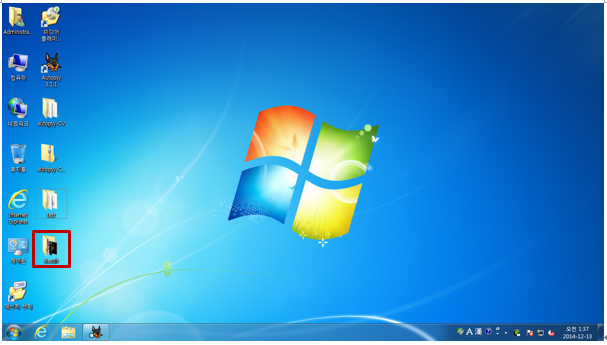




After running is finished, the number of files that classified as Human prints by ‘Valid’,



Images which is classified as Human is saved in Result folder on the Desktop.

You can check the result by Report.txt.

