

## Lab 16 移植影像函式庫至樹莓派

練習目的	提供的程式碼	需要的開發環境/安裝套件	執行指令與重點說明
移植影像函式庫至樹莓派  1. g++指令及編譯 .so 檔 2. Linux 指令介紹 3. 在樹莓派重新編譯並執行 Lab 8 - Lab12	g++:  NImage.h, NImage.cpp NImgProcess.h NImgProcess.cpp NObject.h, NObject.cpp  NImageDLL.h NImageDLL.cpp NImgProcessDLL.h NImgProcessDLL.cpp NObjectDLL.h NObjectDLL.cpp	Ubuntu MATE 22.04 LTS  g++ python3 PyQt5	g++指令及編譯 .so 檔 ✓ g++ -fPIC -shared *.cpp *.cpp -o *.so. ✓ <a href="https://jasonblog.github.io/note/linked_and_loader/gccbian_yi_can_6570-fpic_de_yi_xie_wen_ti.html">https://jasonblog.github.io/note/linked_and_loader/gccbian_yi_can_6570-fpic_de_yi_xie_wen_ti.html</a> ✓ <a href="https://iter01.com/565664.html">https://iter01.com/565664.html</a> ✓ <a href="https://officeguide.cc/python-loading-dll-using-ctypes-tutorial-examples/">https://officeguide.cc/python-loading-dll-using-ctypes-tutorial-examples/</a> ✓ <a href="https://cntofu.com/book/46/gcc/gcan_shu_jie_shao.md">https://cntofu.com/book/46/gcc/gcan_shu_jie_shao.md</a> ✓ <a href="https://kknews.cc/zh-tw/education/kxbq5rr.html">https://kknews.cc/zh-tw/education/kxbq5rr.html</a>

			<p>✓ <a href="http://allstack.net/wordpress/post-1832.html">http://allstack.net/wordpress/post-1832.html</a></p> <p><b>Linux 指令介紹</b></p> <p>✓ 動態連結檔的搜尋路徑為: /usr/lib</p> <p>✓ <code>cp *.so /usr/lib</code> (將 .so 檔移到搜尋路徑的資料夾)</p> <p>✓ <code>LD_LIBRARY_PATH=../folder name</code></p> <p><b>在樹莓派重新編譯並執行 Lab8 - Lab12</b></p> <p>✓ <code>g++ -fPIC -shared NImage.cpp NImageDLL.cpp -o NImage.so.</code></p> <p>✓ <code>cp NImage so /usr/lib</code></p> <p>✓ <code>g++ -fPIC -shared NImage.cpp NImgProcess.cpp</code></p>
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			<p>NImgProcessDLL.cpp -o NImgPrcess.so</p> <ul style="list-style-type: none"> <li>✓ cp NImgProcess.so /usr/lib</li> <li>✓ g++ -fPIC -shared NImage.cpp NObject.cpp NObjectDLL.cpp -o NObject.so</li> <li>✓ cp NObject.so /usr/lib</li> <li>✓ 修改函式庫名稱(*.dll→*.so) 及路徑後，用同樣的 Python 程式執行</li> <li>✓ 修改函式庫名稱(*.dll→*.so) 及路徑後，用同樣的 PyQt5 程式執行</li> </ul>
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