

資料結構作業八 報告

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- (1) 電腦的執行環境: 包括使用的電腦硬體系統 (CPU 編號速度、主記憶體數量)、作業系統、編譯器名稱及版本。

Item	Value
OS Name	Microsoft Windows 7 Ultimate
Version	6.1.7601 Service Pack 1 Build 7601
Other OS Description	Not Available
OS Manufacturer	Microsoft Corporation
System Name	ABYSS
System Manufacturer	TOSHIBA
System Model	Satellite L650
System Type	x64-based PC
Processor	Intel(R) Core(TM) i3 CPU M 370 @ 2.40GHz, 2399 Mhz, 2 Core(s), 4 Logical Processor(s)
BIOS Version/Date	INSYDE 2.80, 7/3/2012
SMBIOS Version	2.6
Windows Directory	C:\Windows
System Directory	C:\Windows\system32
Boot Device	\Device\HarddiskVolume1
Locale	Taiwan
Hardware Abstraction Layer	Version = "6.1.7601.17514"
User Name	abyss\Alastor
Time Zone	Taipei Standard Time
Installed Physical Memory (RAM)	8.00 GB
Total Physical Memory	7.86 GB
Available Physical Memory	4.96 GB
Total Virtual Memory	7.86 GB
Available Virtual Memory	4.56 GB
Page File Space	0 bytes

```
C:\Windows\system32\cmd.exe
Setting up environment for using MinGW with GCC from C:\Program Files (x86)\CodeBlocks\MinGW\
C:\Users\Alastor\Desktop>gcc -v
Using built-in specs.
COLLECT_GCC=gcc
COLLECT_LTO_WRAPPER=c:/program files (x86)/codeblocks/mingw/bin/./libexec/gcc/mingw32/4.7.1/lto-wrapper.exe
Target: mingw32
Configured with: ../../src/gcc-4.7.1/configure --build=mingw32 --enable-languages=c,c++,ada,fortran,objc,obj-c++ --enable-threads=win32 --enable-libgomp --enable-lto --enable-fully-dynamic-string --enable-libstdcxx-debug --enable-version-specific-runtime-libs --with-gnu-ld --disable-nls --disable-win32-registry --disable-symvers --disable-build-poststage1-with-cxx --disable-werror --prefix=/mingw32tdm --with-local-prefix=/mingw32tdm --enable-cxx-flags='-fno-function-sections -fno-data-sections' --with-pkgversion=tdm-1 --enable-sjlj-exceptions --with-bugurl=http://tdm-gcc.tdragon.net/bugs
Thread model: win32
gcc version 4.7.1 (tdm-1)
```

Cpu: Intel® core i3® -370m (2physics core,4 threads)

Mem: Elpita® chip 8GB(4GB+4GB) @533mhz cls(7-7-7-20) Dual Channel Enabled

Compiler: Gcc 4.7.1 (tdm-1)

(2) 大量資料測試之結果，如二、(4)之表格

/* 如欲自己測試請雙擊 testme.bat */

資料量	Insertion	Quick	Radix
100	0.0	0.0	0.0
500	0.0	0.0	0.0
1000	0.0	0.0	0.0
5000	0.0	0.0	0.0
10000	0.1	0.0	0.0
50000	0.8	0.0	0.0
100000	3.5	0.0	0.0
500000	88.7	0.2	0.0