

1. 編譯結果

```
lin@user: /mnt/c/Users/dayes/desktop/assi4
lin@user:/mnt/c/Users/dayes/desktop/assi4$ cc -o main src/main.c src/huffman.c src/arcd.c src/adaptive_model.c -I ./inc
lin@user:/mnt/c/Users/dayes/desktop/assi4$
```

2. 執行結果

```
lin@user: /mnt/c/Users/dayes/desktop/assi4
lin@user:/mnt/c/Users/dayes/desktop/assi4$ cc -o main src/main.c src/huffman.c src/arcd.c src/adaptive_model.c -I ./inc
lin@user:/mnt/c/Users/dayes/desktop/assi4$ ./main
arcd : time = 0.000211 s
huffman : time 0.000259 s
lin@user:/mnt/c/Users/dayes/desktop/assi4$ _
```

3. 結果分析

實測使用一個大小為 128 Bytes 的檔案包含 127 個 A 和 1 個 B，使用花費 arcd 0.000211 秒，使用 huffman 花費 0.000259 秒，使用 arcd 壓縮後檔案大小為 46 Bytes，而 huffman 為 30 Bytes。

```
lin@user: /mnt/c/Users/dayes/desktop/assi4/output
lin@user:/mnt/c/Users/dayes/desktop/assi4/output$ stat output_arcd
  File: output_arcd
  Size: 46          Blocks: 0          IO Block: 4096   regular file
Device: 3fh/63d Inode: 2533274790675429 Links: 1
Access: (0777/-rwxrwxrwx)  Uid: ( 1000/   lin)   Gid: ( 1000/   lin)
Access: 2023-01-10 08:57:27.927373000 +0800
Modify: 2023-01-10 08:57:27.927373000 +0800
Change: 2023-01-10 08:57:27.927373000 +0800
 Birth: -
lin@user:/mnt/c/Users/dayes/desktop/assi4/output$ stat output_huffman
  File: output_huffman
  Size: 30          Blocks: 0          IO Block: 4096   regular file
Device: 3fh/63d Inode: 1407374883832807 Links: 1
Access: (0777/-rwxrwxrwx)  Uid: ( 1000/   lin)   Gid: ( 1000/   lin)
Access: 2023-01-10 08:57:27.927373000 +0800
Modify: 2023-01-10 08:57:27.927373000 +0800
Change: 2023-01-10 08:57:27.927373000 +0800
 Birth: -
lin@user:/mnt/c/Users/dayes/desktop/assi4/output$ _
```