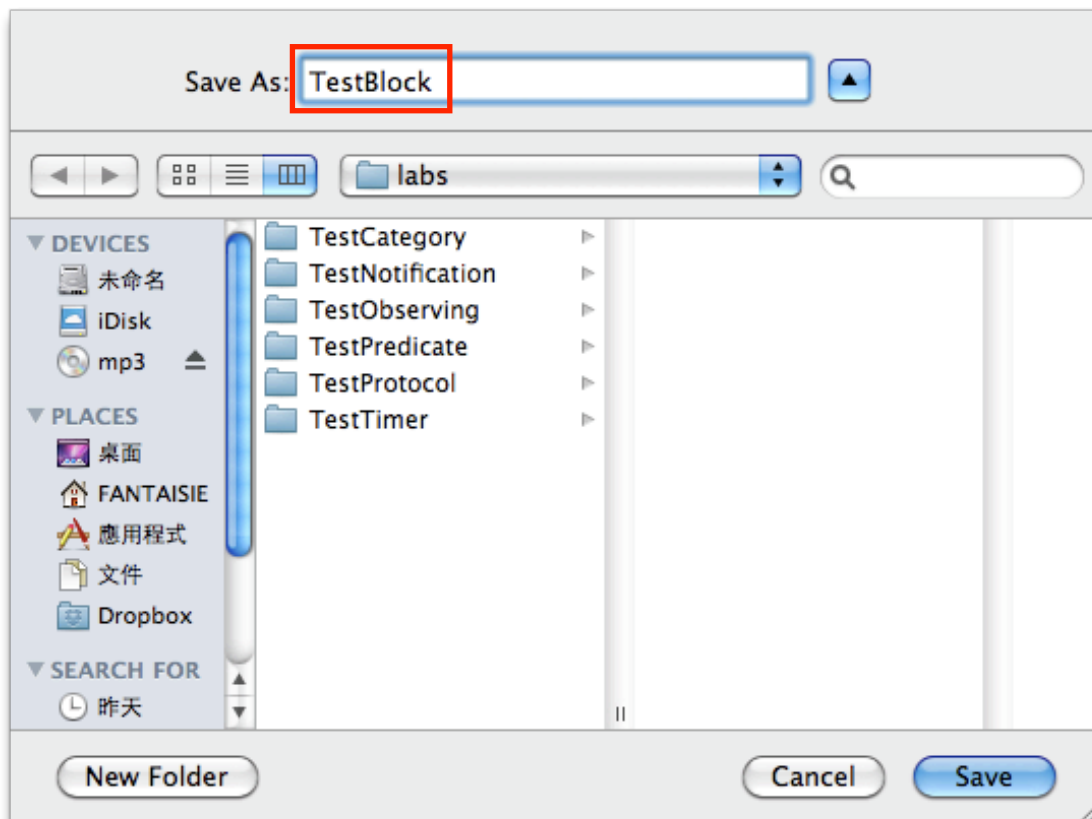
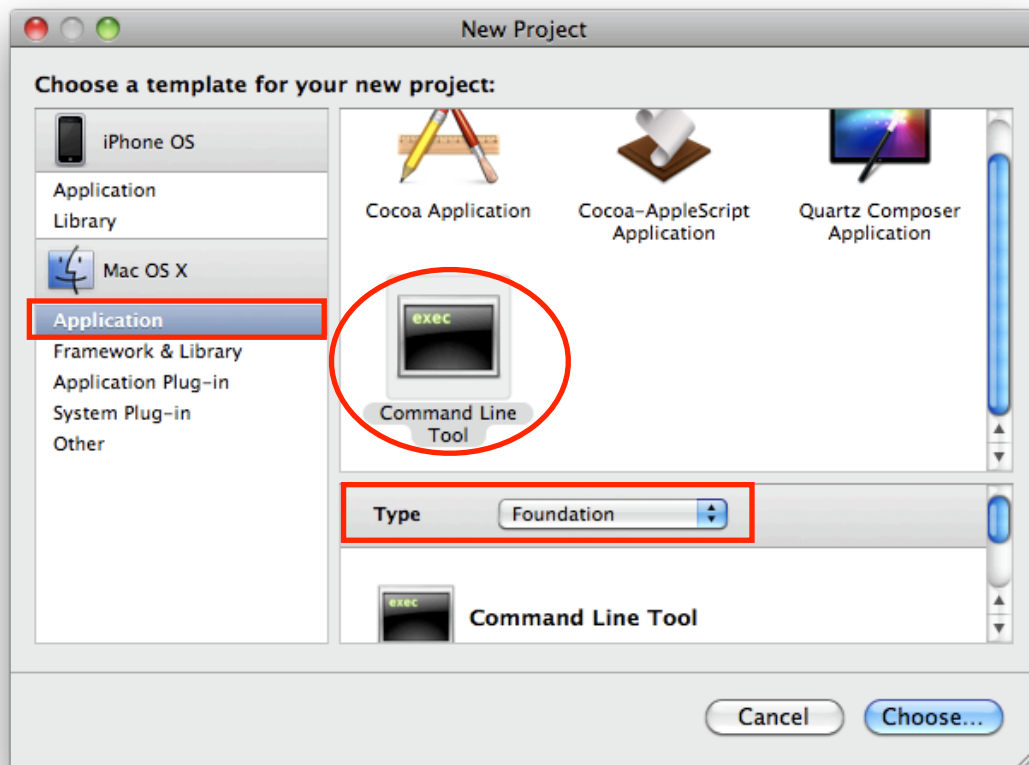


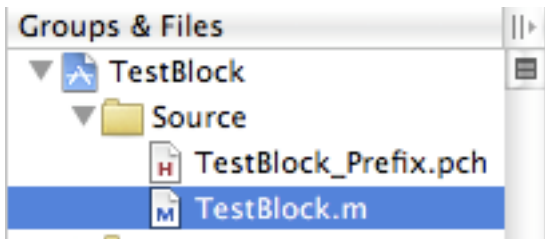
Lab TestBlock

Step1. 在File開啓一個新的project, 選擇 MAC OS X的Command line Tool, Type選擇 Foundation, 將project命名為 TestBlock



Step2. 在Xcode左邊Groups & Files 視窗中, 開啓Source > TestBlock.m

先將印出Hello, World!這行Mark掉, 首先先宣告block int var1和一般int var2,然後實作我們的block叫做myBlock, 之後分兩次第一次更改var1第二次更改var2,在每次更改後印出var1和var2以及執行myBlock所return的回傳值



```
#import <Foundation/Foundation.h>
```

```
int main (int argc, const char * argv[]) {  
    NSAutoreleasePool * pool = [[NSAutoreleasePool alloc] init];
```

```
    // insert code here...  
    //NSLog(@"Hello, World!");  
    __block int var1 = 10;  
    int var2 = 20;
```

```
    int (^myBlock) (int a) = ^(int a){  
        var1 = 5;  
        return var1+var2+a;  
    };
```

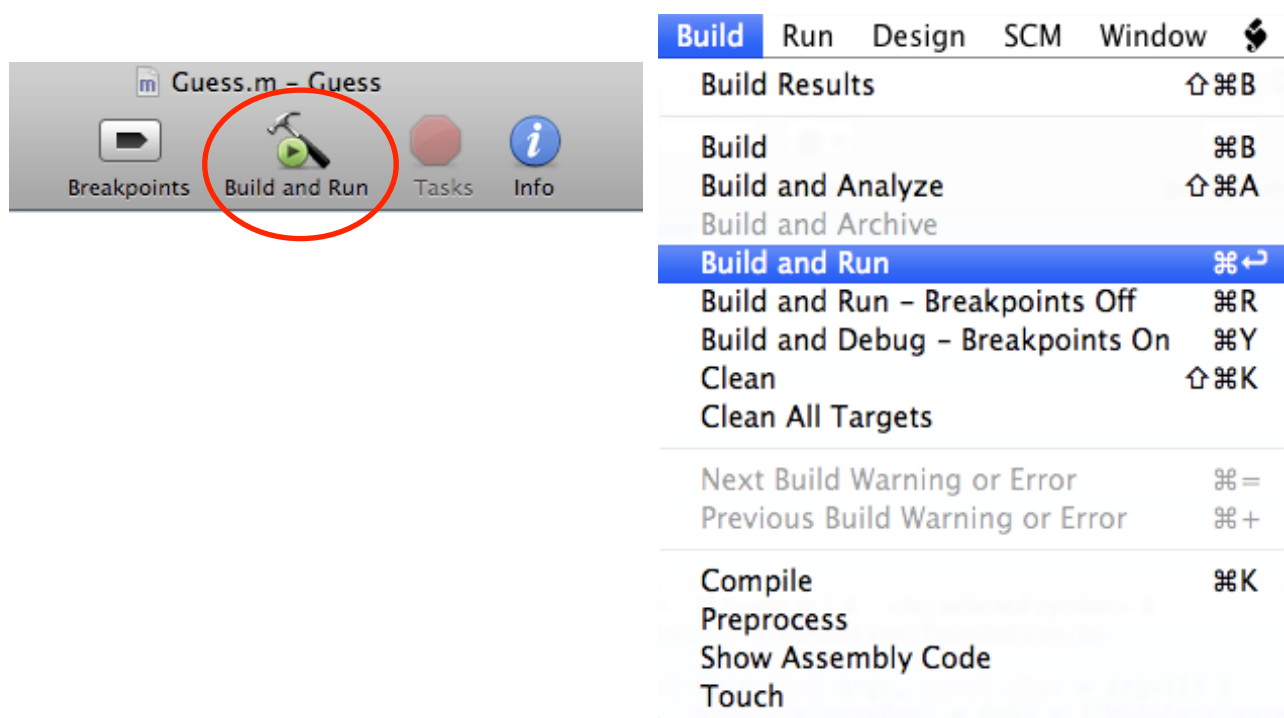
```
    var1 = 7;  
    NSLog(@"var1 = %d\n\n", var1);  
  
    int result1 = myBlock(6);  
    NSLog(@"var1 = %d", var1);  
    NSLog(@"var2 = %d", var2);  
    NSLog(@"result = %d\n\n", result1);
```

```
    var2 = 15;  
    NSLog(@"var2 = %d\n\n", var2);  
  
    int result2 = myBlock(6);  
    NSLog(@"var1 = %d", var1);  
    NSLog(@"var2 = %d", var2);  
    NSLog(@"result = %d", result2);  
    [pool drain];  
    return 0;
```

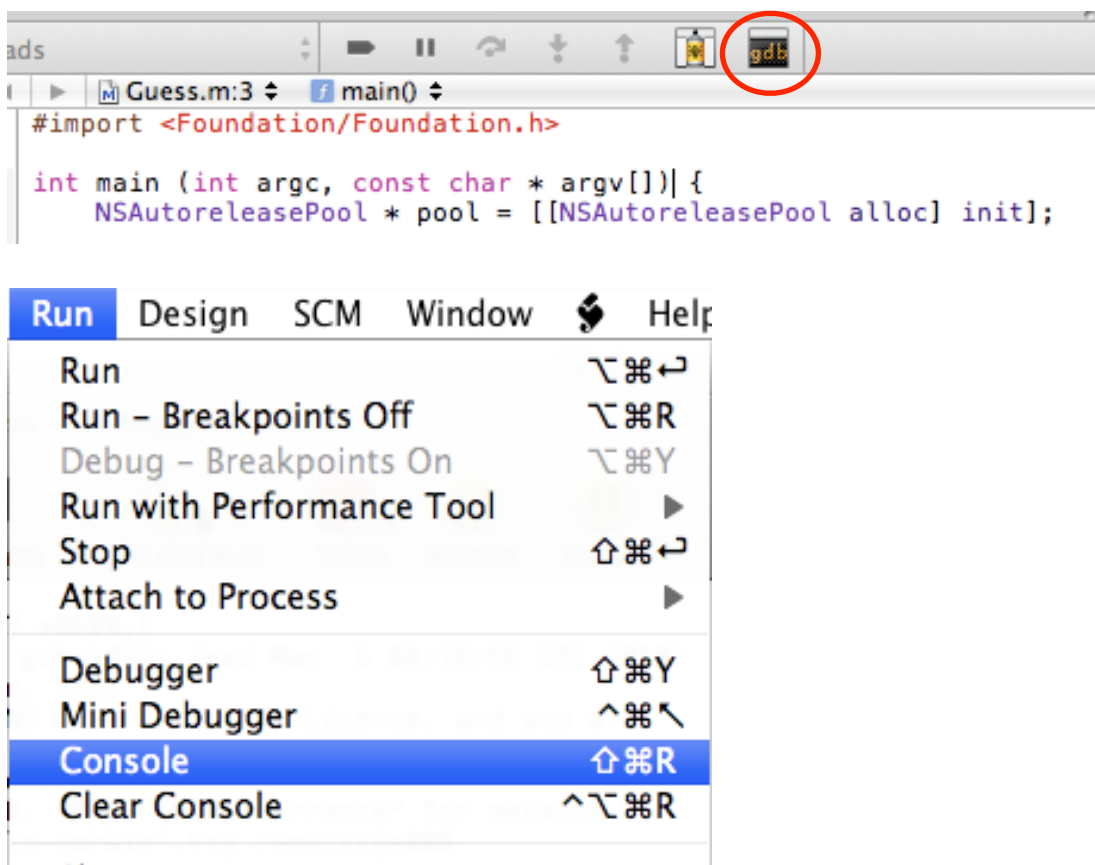
```
}
```

Step3. Build and Run (Command + enter)

在Xcode主頁上按下Build and Run, 或是在Build > Build and Run, 即開始Build code並執行.



可在瀏覽程式視窗上方的 gdb 按下來開啓console, 或是在Run > Console來開啓.



在Console中顯示

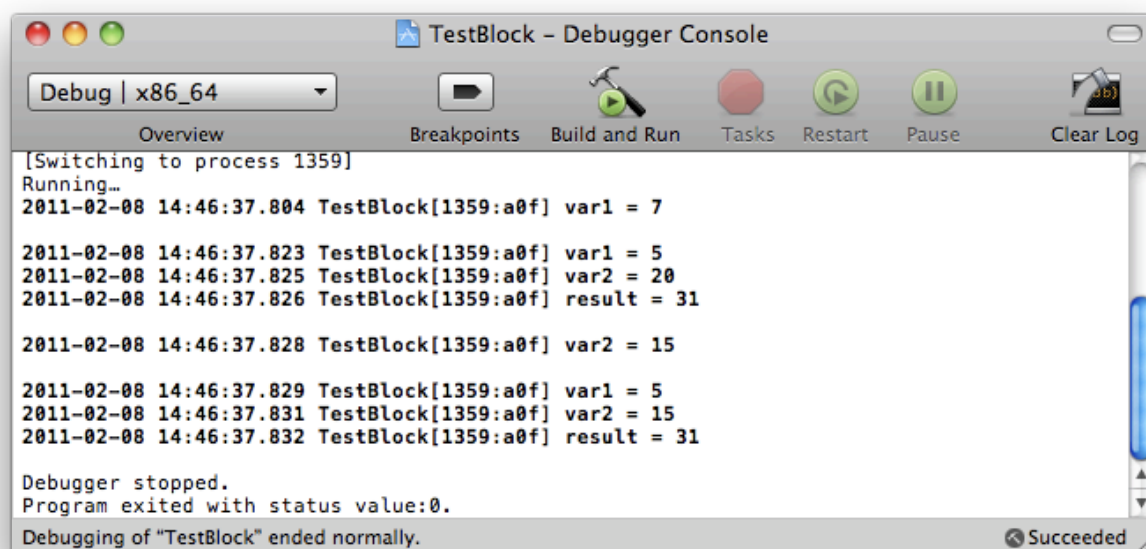
我們將var1改成7時, 印出為7.

執行過myBlock(6)後, var1變為5, var2仍為20, 回傳為31

之後我們將var2改成15, 印出為15.

執行過myBlock(6)後, var1維持為5, var2仍為15, 但回傳仍為31

意思是在Block中非Block變數的變數是使用copy, 在外部更改後Block裡變數的值仍維持不變



```
TestBlock - Debugger Console
Debug | x86_64
Overview Breakpoints Build and Run Tasks Restart Pause Clear Log
[Switching to process 1359]
Running...
2011-02-08 14:46:37.804 TestBlock[1359:a0f] var1 = 7
2011-02-08 14:46:37.823 TestBlock[1359:a0f] var1 = 5
2011-02-08 14:46:37.825 TestBlock[1359:a0f] var2 = 20
2011-02-08 14:46:37.826 TestBlock[1359:a0f] result = 31
2011-02-08 14:46:37.828 TestBlock[1359:a0f] var2 = 15
2011-02-08 14:46:37.829 TestBlock[1359:a0f] var1 = 5
2011-02-08 14:46:37.831 TestBlock[1359:a0f] var2 = 15
2011-02-08 14:46:37.832 TestBlock[1359:a0f] result = 31
Debugger stopped.
Program exited with status value:0.
Debugging of "TestBlock" ended normally.
Succeeded
```