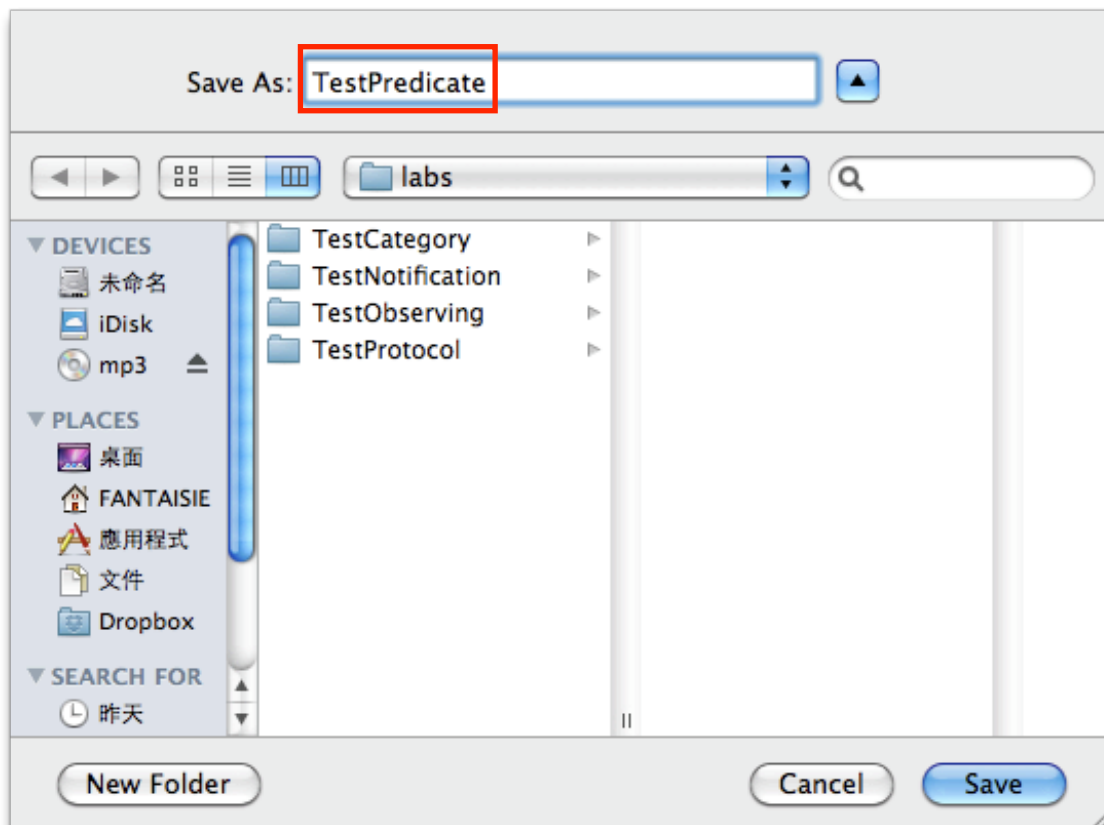
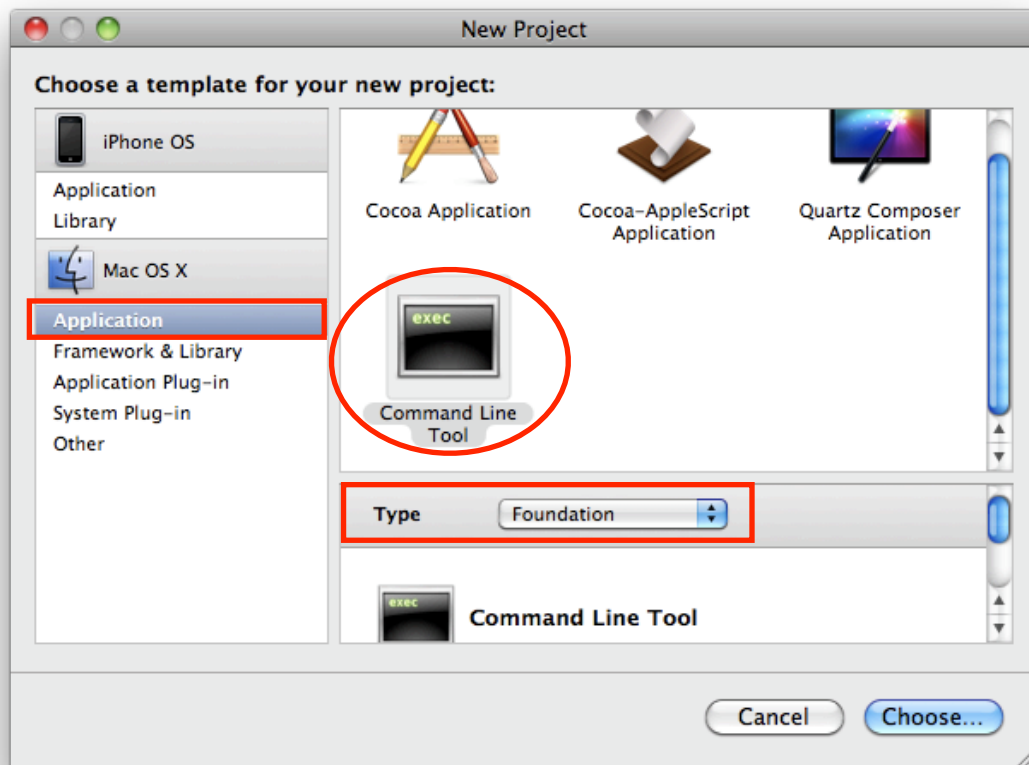


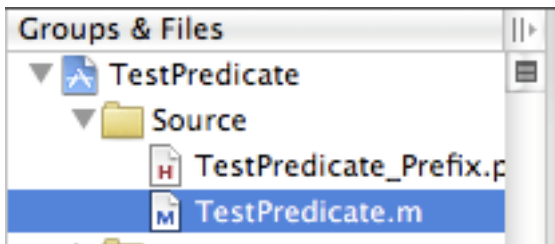
# Lab TestPredicate

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 TestPredicate



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

先將印出Hello, World!這行Mark掉, 並加入以下的程式,先加入三個NSDictionary car1 car2 car3, 裡面各有車子的廠牌名稱和年份,然後放進一個NSArray裡面, 之後使用NSPredicate去判斷三台車子裡是否有如需求的brand和year



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

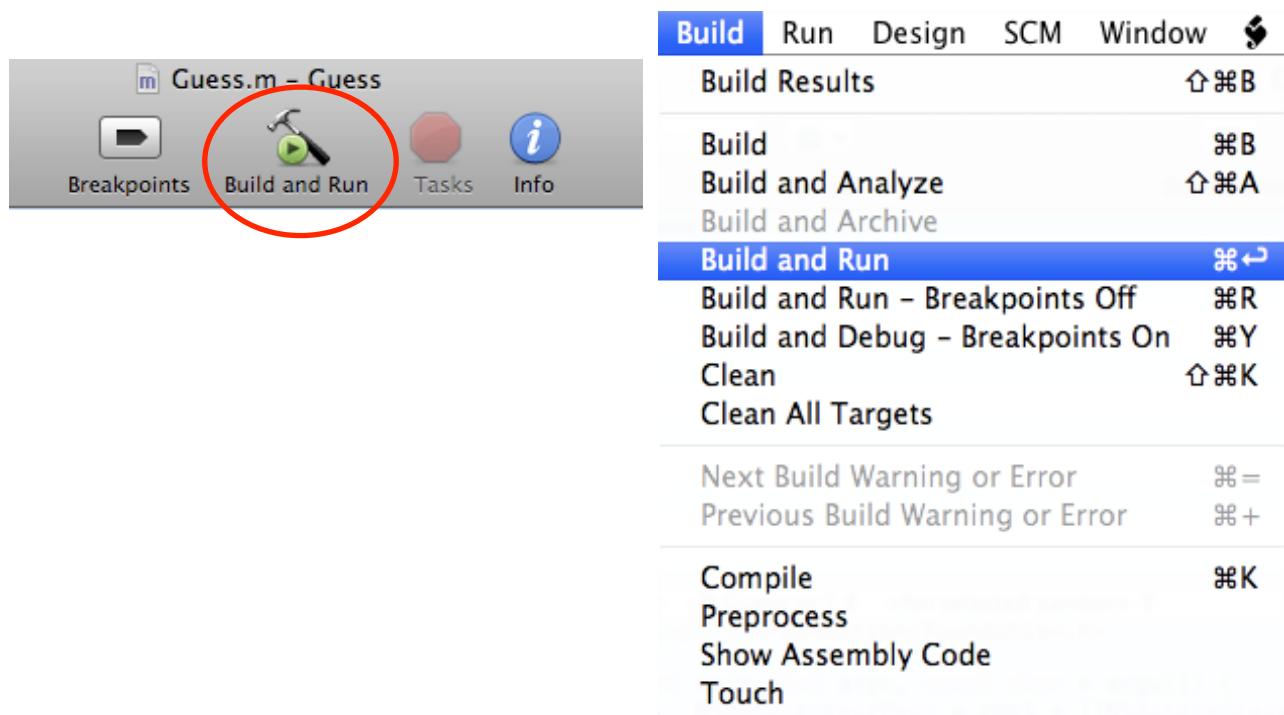
```
int main (int argc, const char * argv[]) {
    NSAutoreleasePool * pool = [[NSAutoreleasePool alloc] init];

    // insert code here...
    //NSLog(@"Hello, World!");
    NSDictionary *car1 = [NSDictionary dictionaryWithObjectsAndKeys:
                           @"BMW", @"brand", [NSNumber
numberWithInteger:2000], @"year", nil];
    NSDictionary *car2 = [NSDictionary dictionaryWithObjectsAndKeys:
                           @"Toyota", @"brand", [NSNumber
numberWithInteger:1998], @"year", nil];
    NSDictionary *car3 = [NSDictionary dictionaryWithObjectsAndKeys:
                           @"Honda", @"brand", [NSNumber
numberWithInteger:2009], @"year", nil];
    NSArray *cars = [NSArray arrayWithObjects:car1, car2, car3, nil];
    NSArray *brands= [NSArray arrayWithObjects:@"Honda", @"Toyota",
nil];
    NSArray *years = [NSArray arrayWithObjects:[NSNumber
numberWithInteger:1995], [NSNumber numberWithInt:2005], nil];
    NSPredicate *findCar = [NSPredicate predicateWithFormat:@"brand IN
%@ && year BETWEEN %@", brands, years];

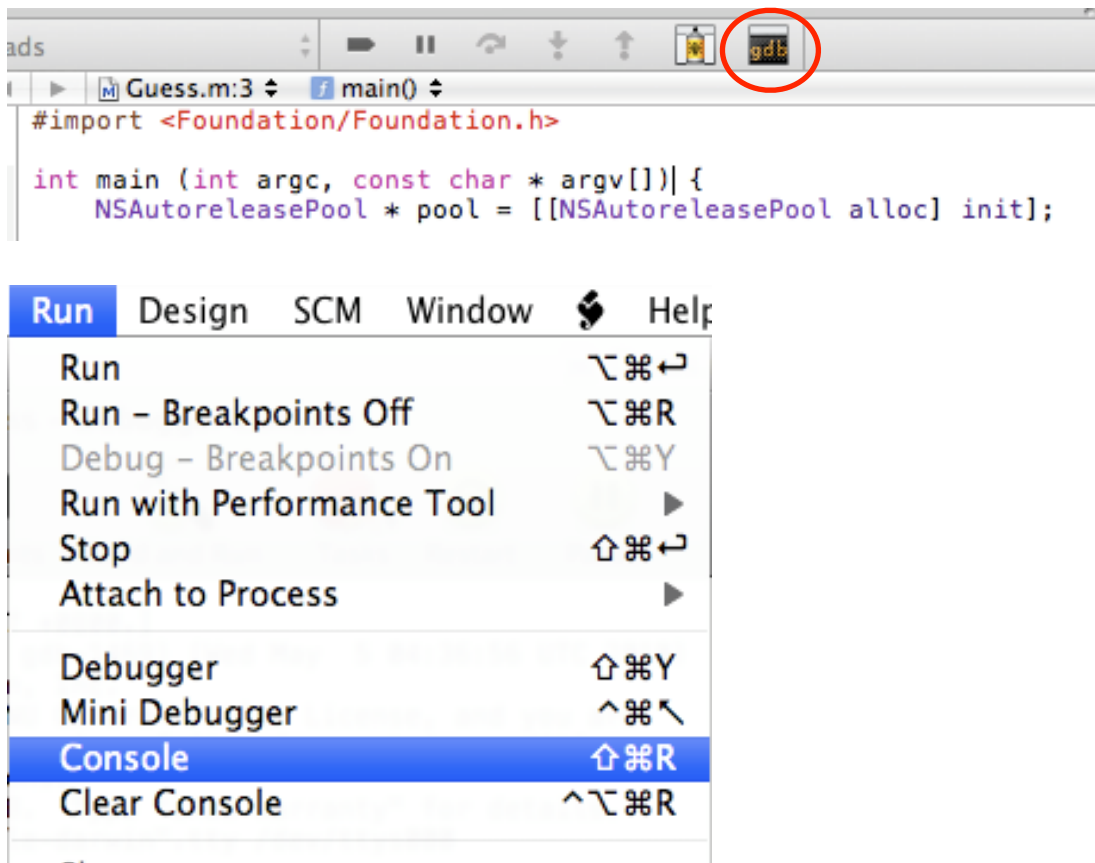
    NSArray* foundCar = [cars filteredArrayUsingPredicate:findCar];
    if(foundCar.count > 0)
        NSLog(@"The car(s) found %@", foundCar);
    else
        NSLog(@"No car is found");
    [pool drain];
    return 0;
}
```

### Step11. Build and Run (Command + enter)

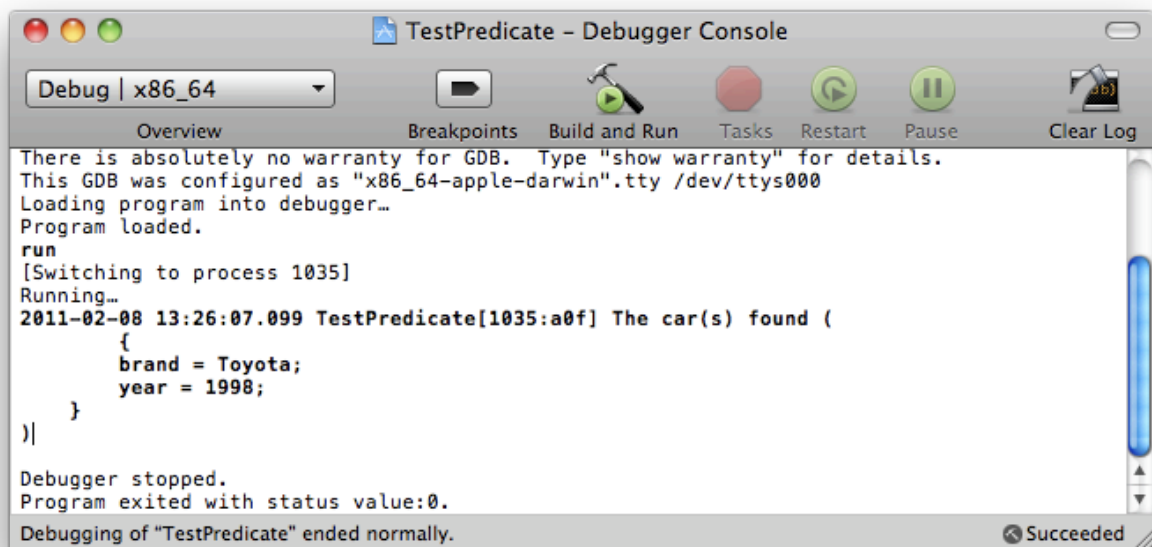
在Xcode主頁上按下Build and Run, 或是在Build > Build and Run, 即開始Build code並執行.



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中顯示有找到一台車brand為Toyota, year為1998



The screenshot shows a debugger console window titled "TestPredicate - Debugger Console". The window has a menu bar with "Debug | x86\_64" and a toolbar with icons for "Breakpoints", "Build and Run", "Tasks", "Restart", "Pause", and "Clear Log". The console output shows the following text:

```
There is absolutely no warranty for GDB. Type "show warranty" for details.  
This GDB was configured as "x86_64-apple-darwin".tty /dev/ttys000  
Loading program into debugger...  
Program loaded.  
run  
[Switching to process 1035]  
Running...  
2011-02-08 13:26:07.099 TestPredicate[1035:a0f] The car(s) found (  
    {  
        brand = Toyota;  
        year = 1998;  
    }  
)|  
Debugger stopped.  
Program exited with status value:0.  
Debugging of "TestPredicate" ended normally.
```

The status bar at the bottom right indicates "Succeeded".