

Step by step instructions for class exercise Fraction.

Start Xcode, create a new project called Fraction. Ensure that you pick OSX Application (and not default iOS Application section. Pick Command Line from OSX Application section. Provide name of project as fraction. Save project in your fav place.

On file Navigator notice main.m file. We will add our class definition and implementation here.

Update main.m to add following code

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

//---- @interface section ----
@interface Fraction: NSObject
{
    int numerator;
    int denominator;
}

-(void) print;
-(void) setNumerator: (int) n;
-(void) setDenominator: (int) d;

@end
```

Next Add implementation

```
//---- @implementation section ----
@implementation Fraction
-(void) print
{
    NSLog ("%i/%i", numerator, denominator);
}
-(void) setNumerator: (int) n
{
    numerator = n;
}
-(void) setDenominator: (int) d
{
    denominator = d;
}
@end
```

Finally update main () as follows:

```
Fraction *myFraction;
```

```
// Create an instance of a Fraction
myFraction = [Fraction alloc];
myFraction = [myFraction init];

// Set fraction to 1/3
[myFraction setNumerator: 1];
[myFraction setDenominator: 3];

// Display the fraction using the print method
NSLog(@"The value of myFraction is:");
[myFraction print];
```

Build and Run the project.

Notice that in the console window you will see output.

Bonus

The product actually resides in different directory.

You can navigate to directories like

./Users/parikhj/Library/Developer/Xcode/DerivedData/fraction-
ejhgjqyalpdjvicpogasqndhkich/Build/Products/Debug/

and find fraction executable

You can execute it by giving specific path

Note that if you are using file navigator, you will need to hold option key on Finder, go to "Go" tab and you will see Library directory. It's hidden and not ordinarily visible.

We won't use this knowledge for the class but just fyi based on questions from past class.