

Computer Graphics & Image Processing Lab – 1
Line Drawing in OpenGL Documentation Assignment

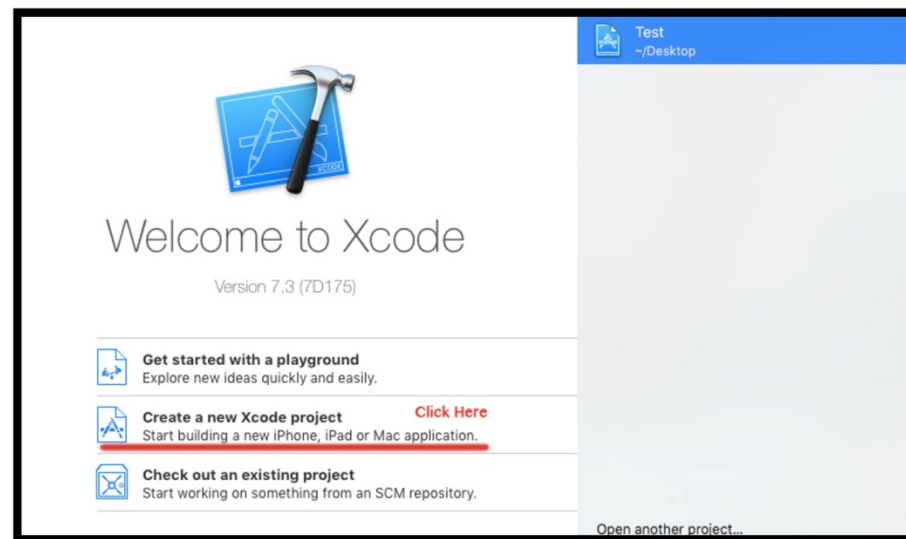
Asif Mohaimen
2012331054

How to create a OpenGL Project in Mac OS X El Capitan 10.11.4

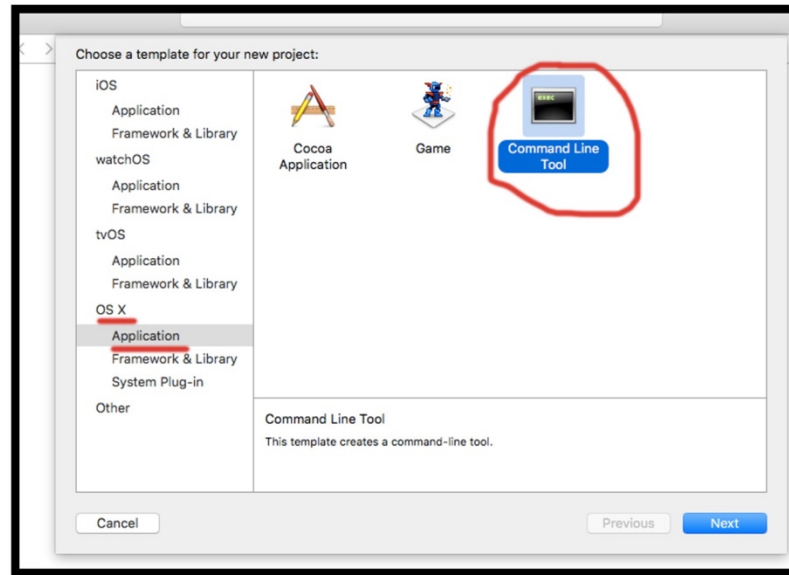
IDE: Xcode Version 7.3

Steps: Download Xcode from the App Store & Start the process.

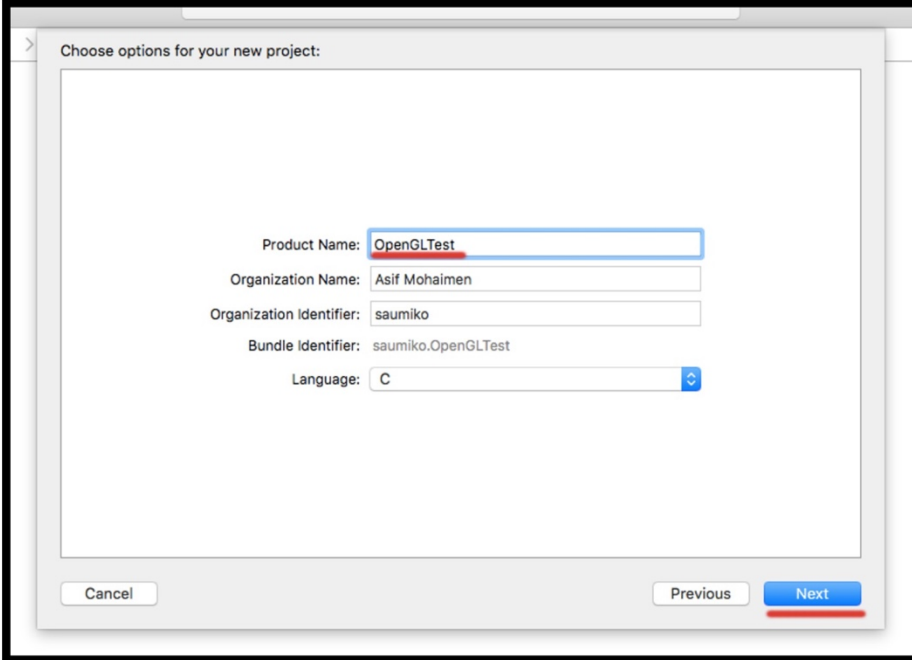
Step 1



Open Xcode (Create a new Xcode Project)

Step 2

Select OS X Application from side pane and Select Command Line Tool
Click Next.

Step 3

Choose options for your new project:

Product Name: OpenGLTest

Organization Name: Asif Mohaimen

Organization Identifier: saumiko

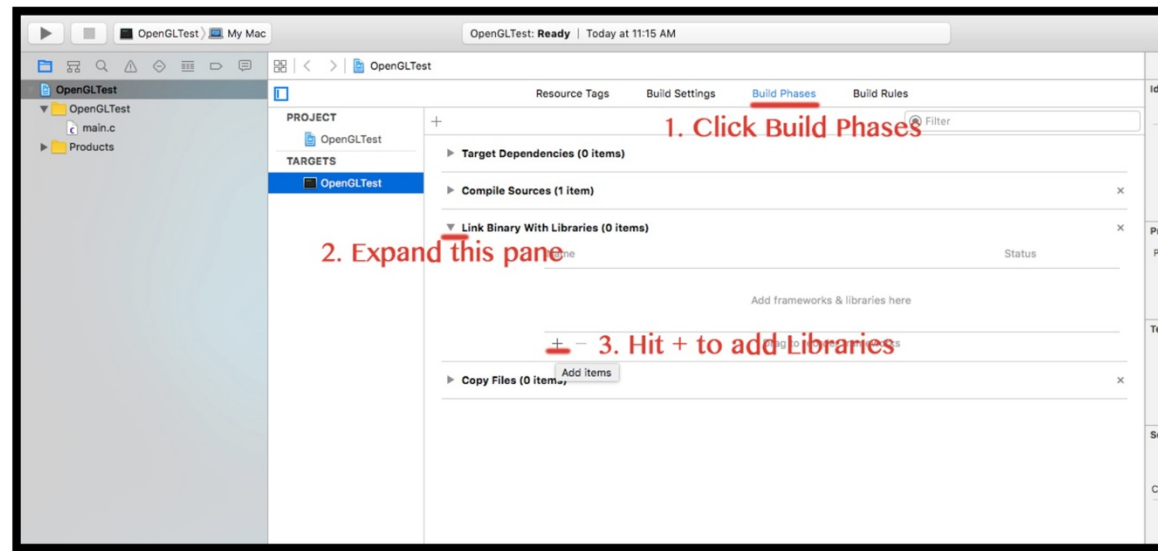
Bundle Identifier: saumiko.OpenGLTest

Language: C

Cancel Previous **Next**

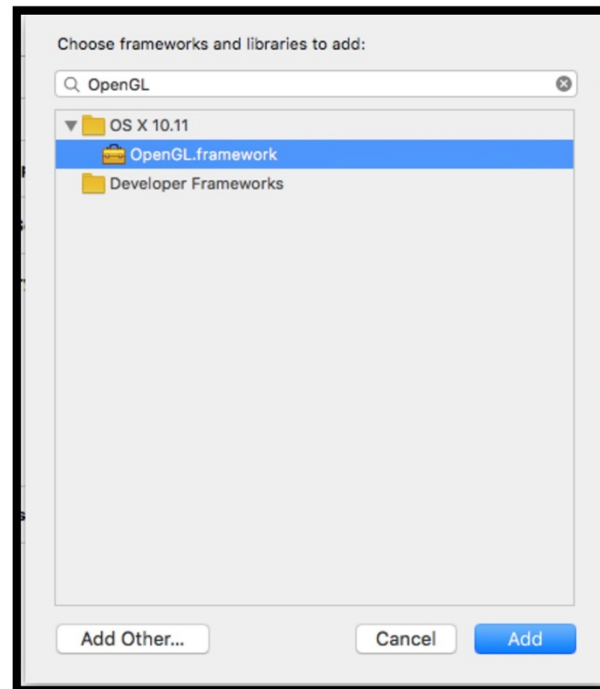
Give a project name & Click next.
A window will pop up to show the project location.
Save the project.

Step 4



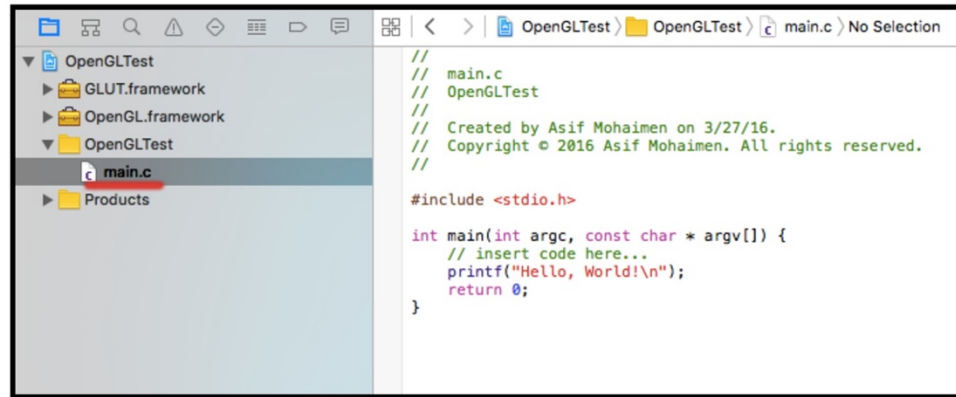
Go to “Build Phases” Expand “Link Binary With Libraries (0 items)” Click + to add Libraries.

Step 5



Search For OpenGL Select it and Add
Similarly add GLUT Framework

Final Step of Project Setup



Select Main file from the project pane and start coding.

```
/*
This code will take 4 Co-Ordinate (x1, y1, x2, y2) inputs from the
user.
Then it will Draw a line with the Two points given as input.
The co-ordinates should be given between -100 to 100.
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*/

#ifdef __APPLE__
#include <GLUT/glut.h>
#else
#include <GL/glut.h>
#endif
#include <stdlib.h>
#include <stdio.h>

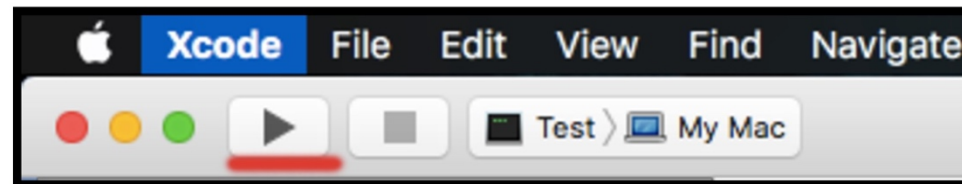
void mydisplay()
{
    glClear(GL_COLOR_BUFFER_BIT);
    glBegin(GL_LINES);
    float x1, x2, y1, y2;
    scanf("%f %f %f %f", &x1, &y1, &x2, &y2);
    glVertex3f(x1/100, y1/100, 0.0);
    glVertex3f(x2/100, y2/100, 0.0);
    glEnd();
    glFlush();
}

int main(int argc, char** argv)
{
    glutInit(&argc, argv);
    glutCreateWindow("Whatever");
    glutDisplayFunc(mydisplay);
    glutMainLoop();
}
```

Sample Code For Beginners

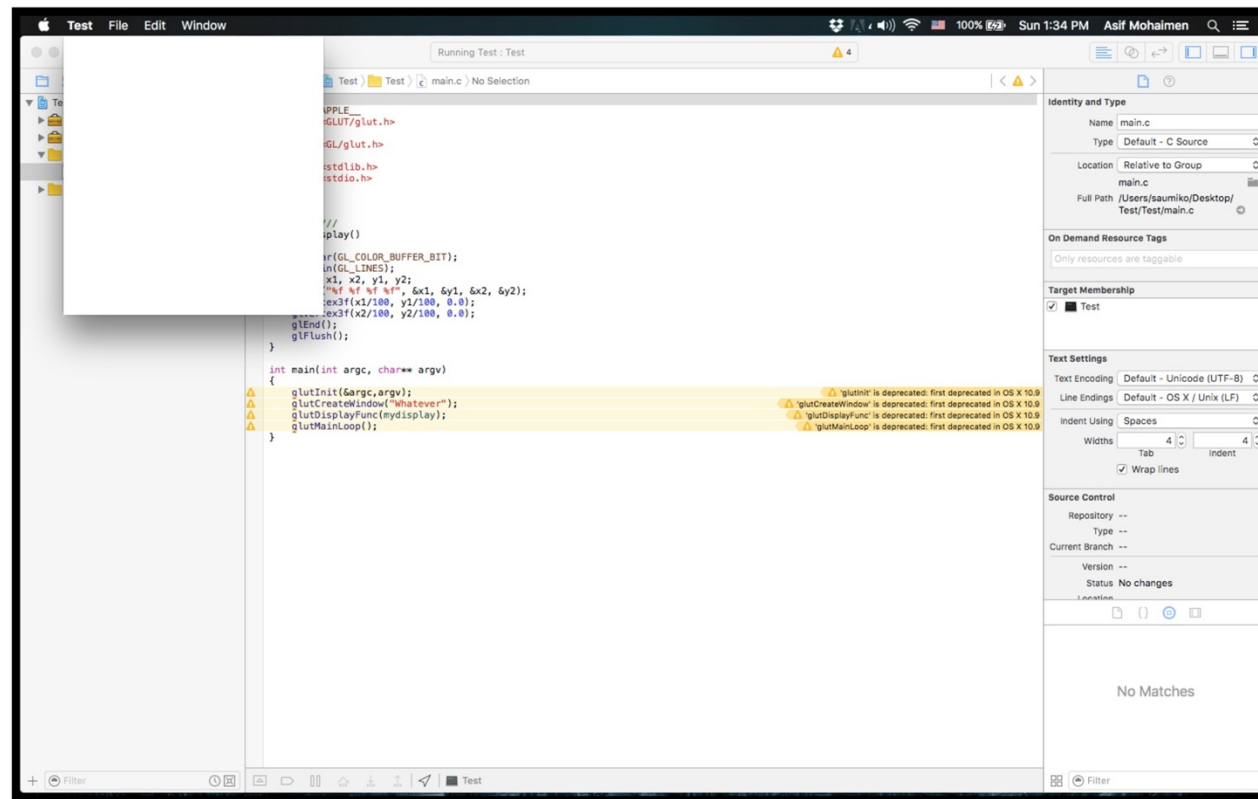
How to Run this Code

Step 1



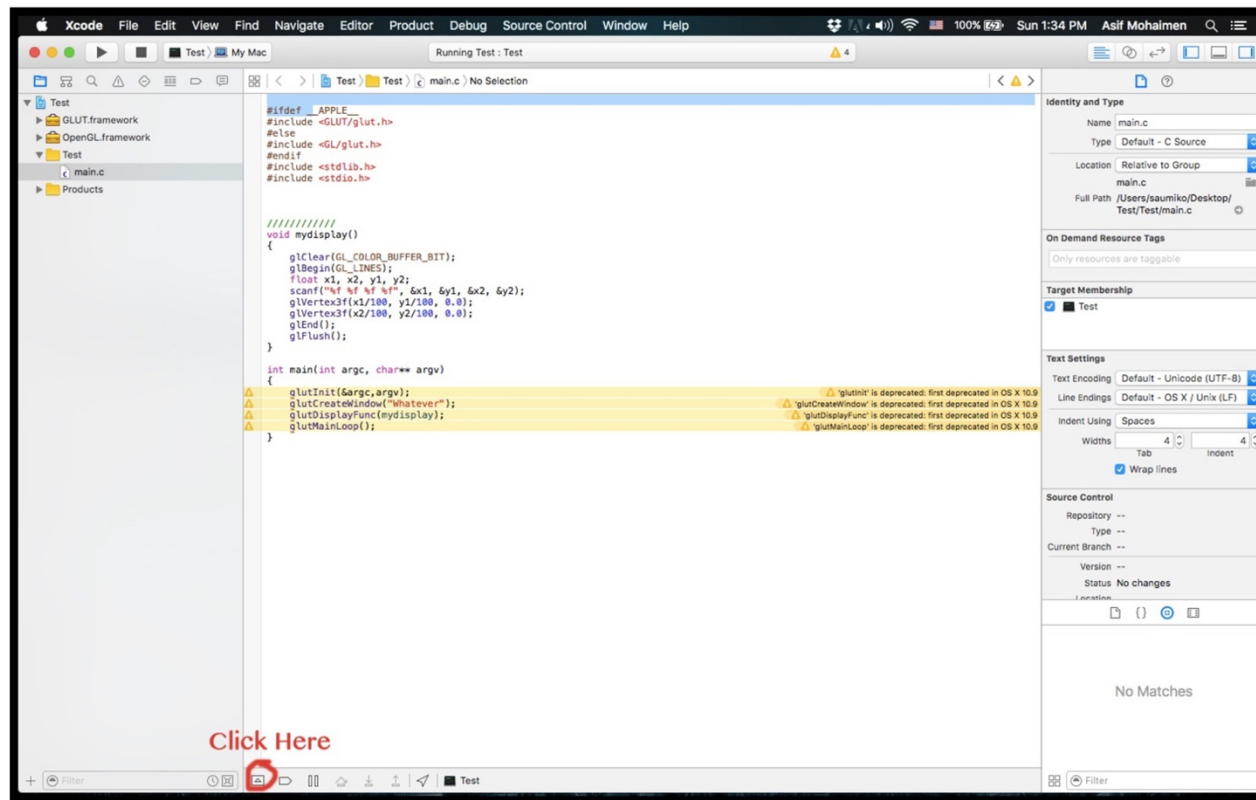
Click the Run button From the Top Left corner of your Screen.

Step 2



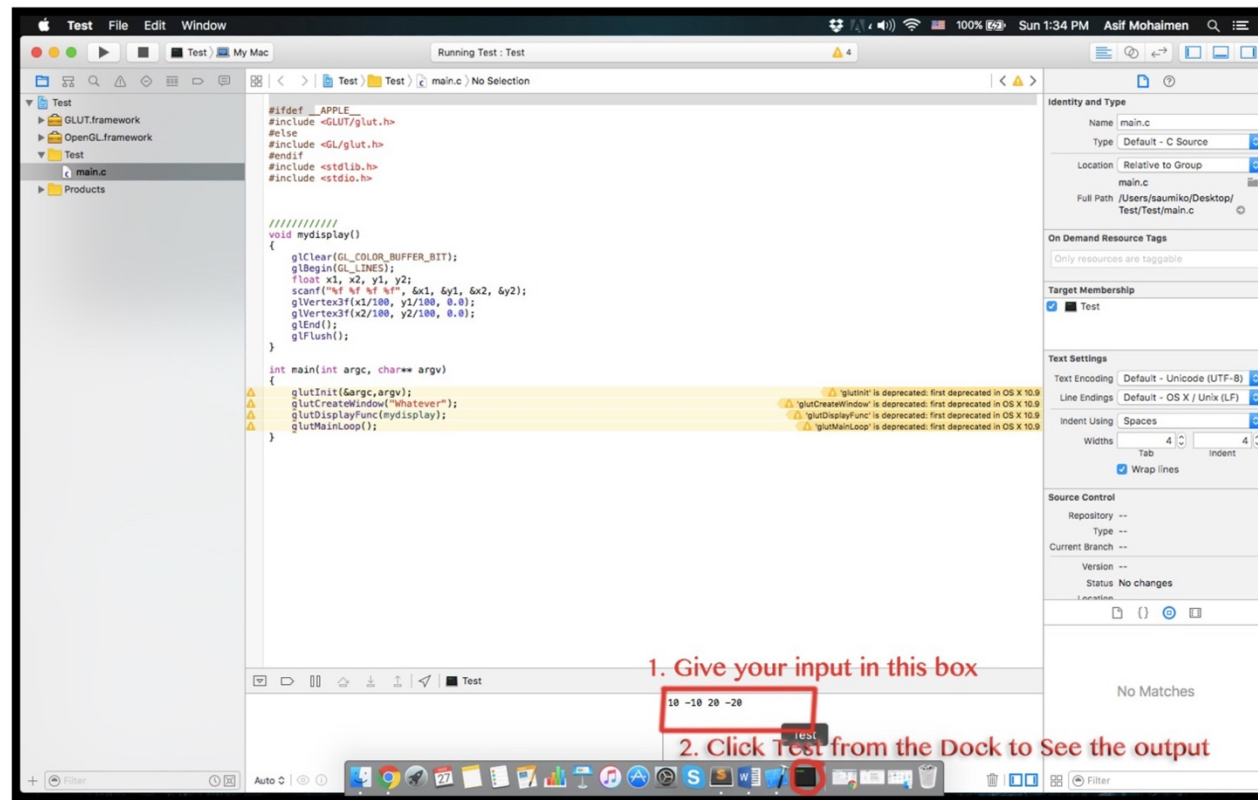
The “Test” program will start. Click Somewhere in the IDE window to go back to the IDE.

Step 3



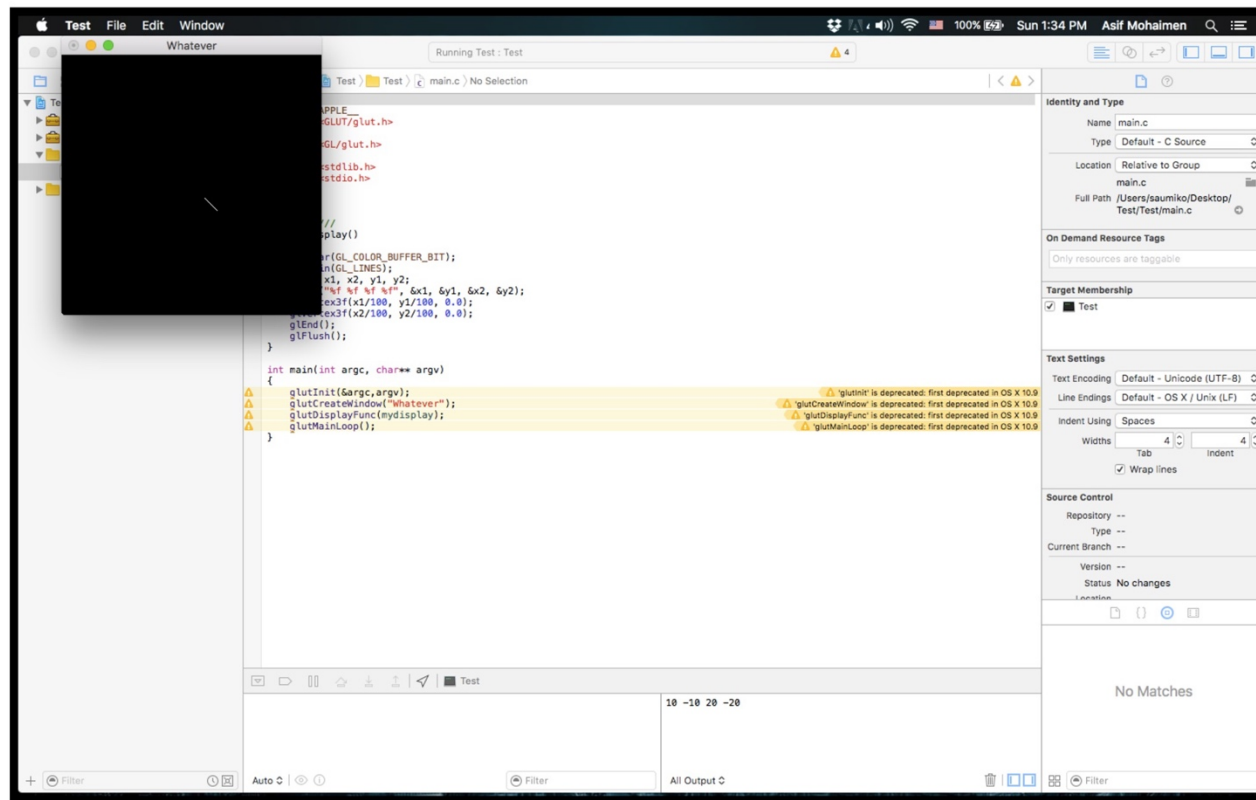
Click in the Shown Button.

Step 4



Give your inputs in the output box. Press Enter & Go back to test from Dock to see the output.

Final Step



See the output in your screen like this.