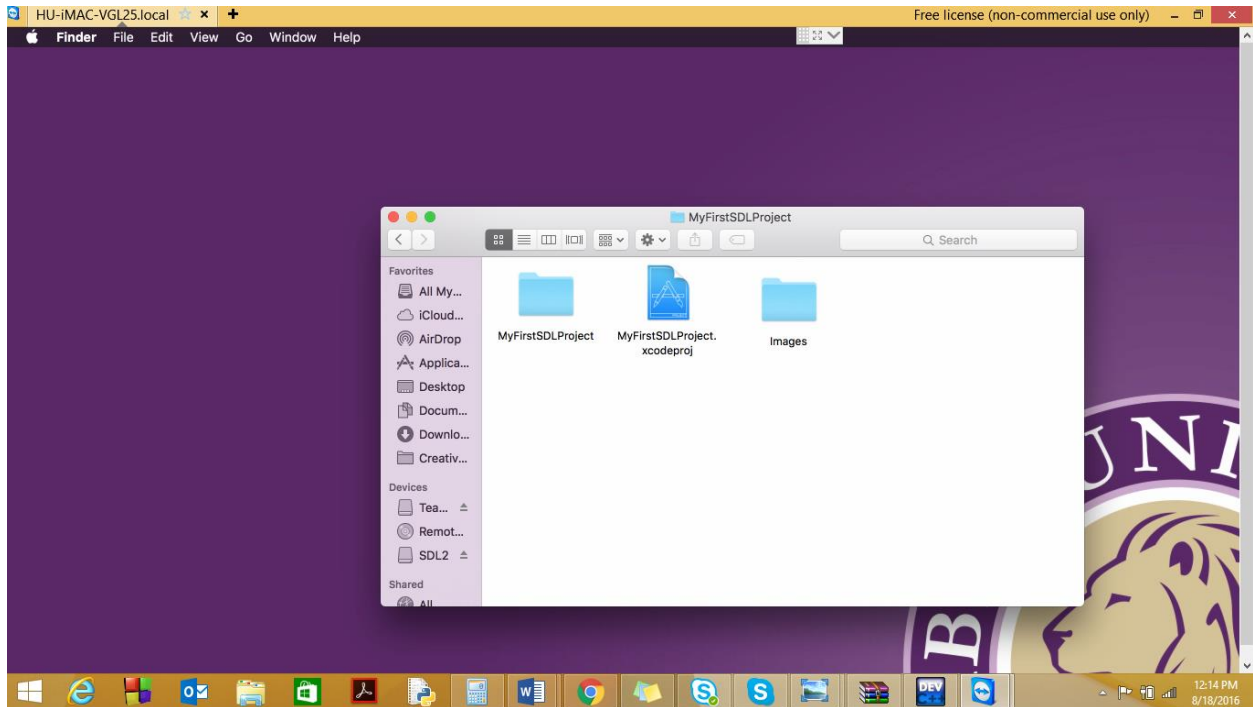
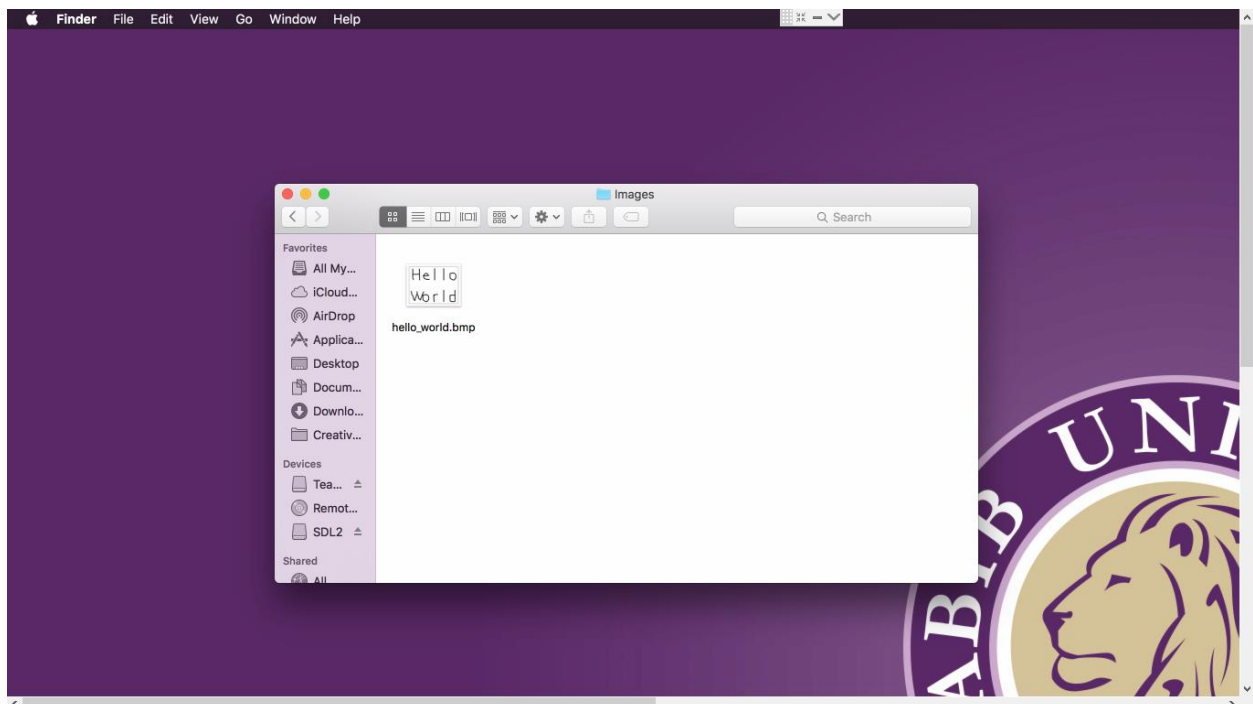


Getting an Image on the Screen

1. Inside your **Working Directory**, create a *new folder*.
Rename it to **Images**.



2. Upload **hello_world.bmp** file inside **Images** folder.



3. Copy the following code on **main.cpp**.

```
//Using SDL and standard IO
#include <SDL2/SDL.h>
#include <stdio.h>

//Screen dimension constants
const int SCREEN_WIDTH = 640;
const int SCREEN_HEIGHT = 480;

//Starts up SDL and creates window
bool init();

//Loads media
bool loadMedia();

//Frees media and shuts down SDL
void close();

//The window we'll be rendering to
SDL_Window* gWindow = NULL;

//The surface contained by the window
SDL_Surface* gScreenSurface = NULL;

//The image we will load and show on the screen
SDL_Surface* gHelloWorld = NULL;

bool init()
{
    //Initialization flag
    bool success = true;

    //Initialize SDL
    if( SDL_Init( SDL_INIT_VIDEO ) < 0 )
    {
        printf( "SDL could not initialize! SDL_Error: %s\n", SDL_GetError() );
        success = false;
    }
    else
    {
        //Create window
        gWindow = SDL_CreateWindow( "SDL Tutorial", SDL_WINDOWPOS_UNDEFINED,
        SDL_WINDOWPOS_UNDEFINED, SCREEN_WIDTH, SCREEN_HEIGHT, SDL_WINDOW_SHOWN );

        if( gWindow == NULL )
        {
            printf( "Window could not be created! SDL_Error: %s\n", SDL_GetError() );
            success = false;
        }
        else
        {
            //Get window surface
            gScreenSurface = SDL_GetWindowSurface( gWindow );
        }
    }

    return success;
}
```

```

bool loadMedia()
{
    //Loading success flag
    bool success = true;

    //Load splash image
    gHelloWorld = SDL_LoadBMP( "Images/hello_world.bmp" );
    if( gHelloWorld == NULL )
    {
        printf( "Unable to load image %s! SDL Error: %s\n", "Images/hello_world.bmp", SDL_GetError() );
        success = false;
    }

    return success;
}

void close()
{
    //Deallocate surface
    SDL_FreeSurface( gHelloWorld );
    gHelloWorld = NULL;

    //Destroy window
    SDL_DestroyWindow( gWindow );
    gWindow = NULL;

    //Quit SDL subsystems
    SDL_Quit();
}

int main( int argc, char* args[] )
{
    //Start up SDL and create window
    if( !init() )
    {
        printf( "Failed to initialize!\n" );
    }
    else
    {
        //Load media
        if( !loadMedia() )
        {
            printf( "Failed to load media!\n" );
        }
        else
        {
            //Apply the image
            SDL_BlitSurface( gHelloWorld, NULL, gScreenSurface, NULL );

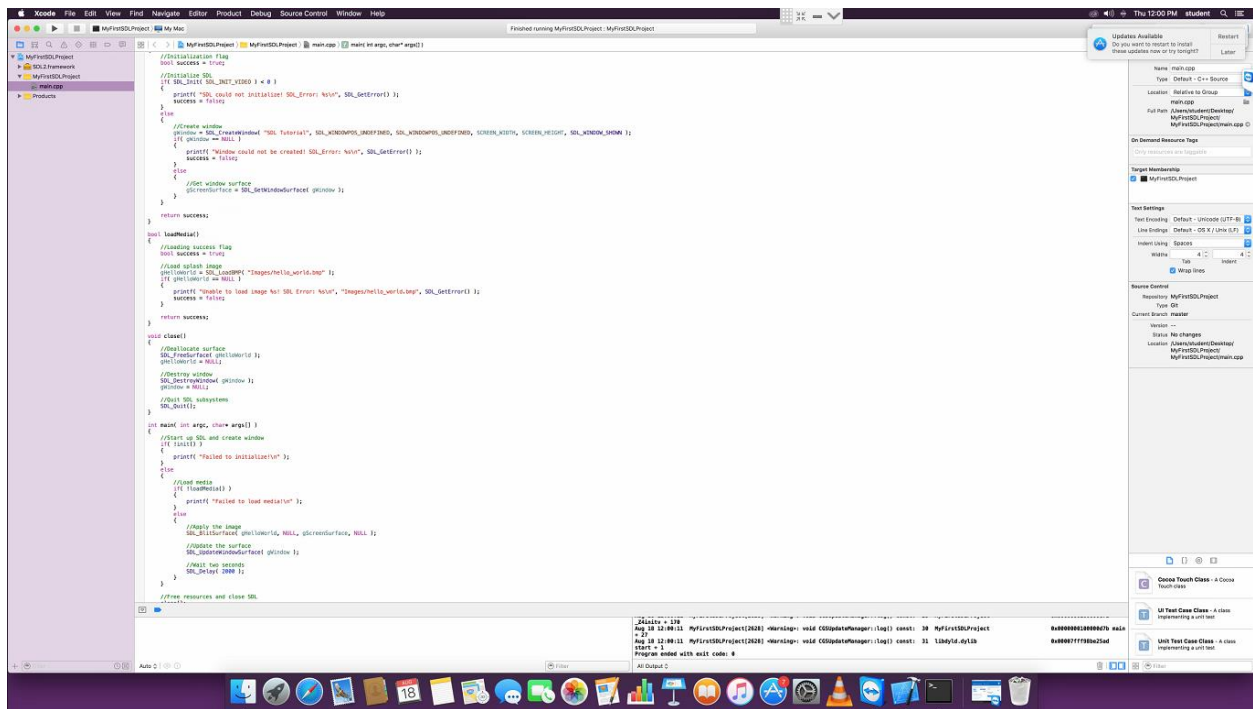
            //Update the surface
            SDL_UpdateWindowSurface( gWindow );

            //Wait two seconds
            SDL_Delay( 2000 );
        }
    }

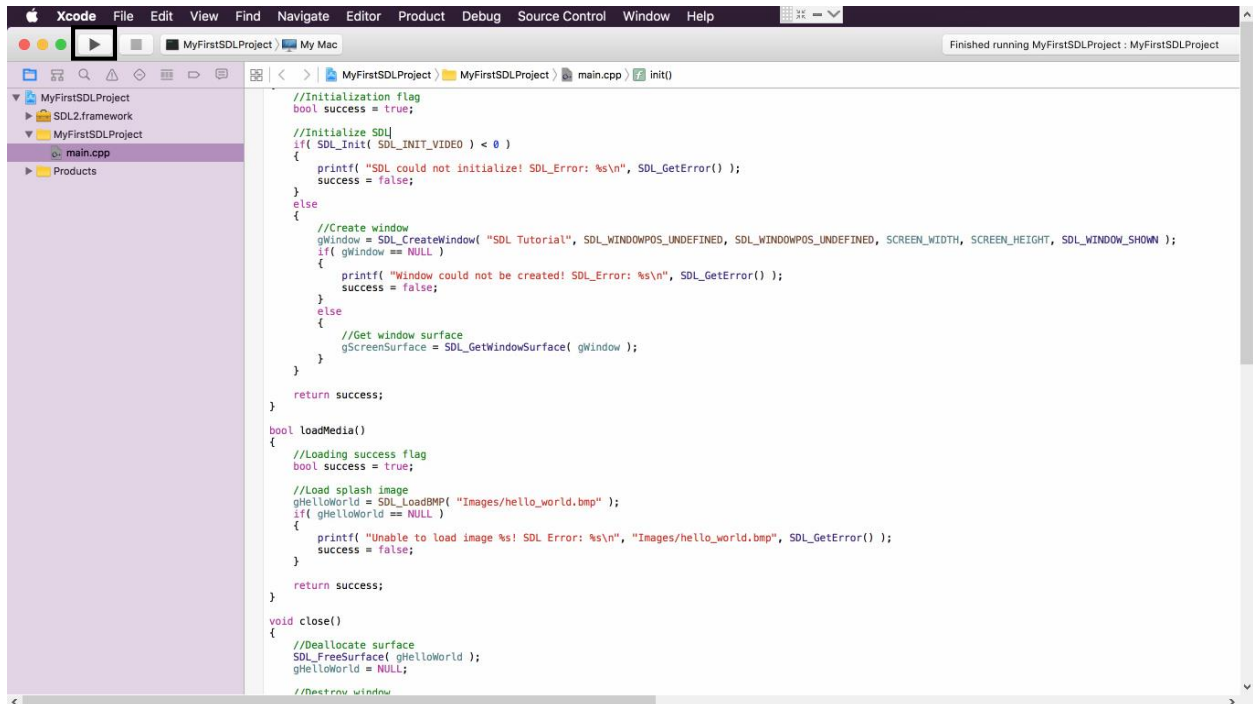
    //Free resources and close SDL
    close();

    return 0;
}

```



4. Click on Run (⏏ Sign)



[illegible]

The image shows a screenshot of a Visual Studio IDE with a C# WinForms application. The main window, titled 'Hello World', has a red border and a yellow background. Inside the window, the text 'Hello World' is displayed in a large, black, handwritten-style font. The code in the MainForm.cs file is as follows:

```
// MainForm.cs
using System;
using System.Windows.Forms;

namespace MyFirstWinForm
{
    public partial class MainForm : Form
    {
        public MainForm()
        {
            InitializeComponent();
        }

        private void MainForm_Load(object sender, EventArgs e)
        {
            //Set window title
            Text = "Hello World";

            //Set window size
            Width = 300;
            Height = 100;

            //Set window location
            Location = new Point(100, 100);

            //Set window style
            Style = FormBorderStyle.FixedSingle;
            MaximizeBox = false;
            MinimizeBox = false;
            TopMost = false;
            ShowInTaskbar = true;
            WindowState = FormWindowState.Normal;
        }

        private void MainForm_Click(object sender, EventArgs e)
        {
            //Set window text
            Text = "Hello World";
        }
    }
}
```

The output window at the bottom shows the text 'Hello World'. The Visual Studio interface includes the Solution Explorer on the left, the Code editor in the center, and the Output window at the bottom. The status bar at the bottom indicates 'All Debug'.

Congratulations! You have successfully rendered the image on the screen!