***Setup opencv in android studio*** *()*

1. Extract the downloaded zip file.( https://sourceforge.net/projects/opencvlibrary/files/opencv-android/3.1.0/OpenCV-3.1.0-android-sdk.zip/download)

2. Open Android Studio and create a new project with package of your choice. Here I have created a new project with **com.learn2crack.opencvdemo**

3. Then select **File ->New -> Import Module**

4. You need to select the OpenCV SDK location. Select **OpenCV-android-sdk/sdk/java**. Then select Next and Finish. OpenCV sdk is imported as a module.

5. In the project explorer change the project view from Android to Project. Open **Project -> openCVLibrary -> build.gradle**

6. Change the **compileSdkVersion**, **targetSdkVersion** and **buildToolsVersion** value to the latest version you use. Here use 23, 23 and 23.0.2. Then sync the project. The errors will be gone.

7. Switch back to Android view in Project explorer. Right click on the app module and select **Open Module Settings**.

8. For the app module in the Dependencies tab, select **Add -> Module Dependency -> openCVLibrary**

**Add native llib**

1. Now add native **JNI** libraries in our project. These libraries should be added in jniLibs directory. Create a new **jniLibs** directory in **app-> src -> main**.

2. Open the extracted OpenCV SDK directory. Switch to **OpenCV-android-sdk/sdk/native/libs** directory.

3. You will find directories for many CPU architectures. Copy the required architecture directory to the **jniLibs** directory. Here I copied x86\_64 and armeabi-v7a because my Android emulator has **x86\_64** architecture and my OnePlus One has **armeabi-v7a** architecture. Delete all files except **libopencv\_java3.so**.

4. Open your **gradle.properties** file and enter the following code.

**android.useDeprecatedNdk=true**

Now we have setup SDK in our Android Studio project. Lets test whether OpenCV is loaded.

package com.learn2crack.opencvdemo;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.util.Log;

import org.opencv.android.OpenCVLoader;

public class MainActivity extends AppCompatActivity {

    private static final String TAG = "MainActivity";

    static {

        if(!OpenCVLoader.initDebug()){

            Log.d(TAG, "OpenCV not loaded");

        } else {

            Log.d(TAG, "OpenCV loaded");

        }

    }

    @Override

    protected void onCreate(Bundle savedInstanceState) {

        super.onCreate(savedInstanceState);

        setContentView(R.layout.activity\_main);

    }

}