# Download the apk demo file:

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In the command prompt > adb install
C:\Users\kiran>Downloads\ApiDemos-debug.apk

# Download the amazon apk file:

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Drop the apk file to the emulator it automatically installs it.
actionsFramework[Package]
    /Utility[Folder]
        TouchActionsApi.java[Class]
    /tests[Folder]
        LongPressTest.java[Class]
        TapTest.java[Class]

**Script in TouchActionApi.java:**
```java
package actionsFramework.utility;
import io.appium.java_client.android.AndroidDriver;
public class TouchActionApi{
    AndroidDriver driver;
    // Constructor
    public TouchActionApi(AndroidDriver driver){
        this.driver = driver;
    }
    // Tap on an element
    public void tap(WebElement ele){
```

```java
        PointerInput touch = new
PointerInput(PointerInput.Kind.TOUCH, "finger");
        Sequence tap = new Sequence(touch, 0);
        tap.addAction(touch.createPointerMove(
        Duration.ZERO,
        PointerInput.Origin.fromElement(ele),
        0, 0));
        tap.addAction(touch.createPointerDown(0));
        tap.addAction(touch.createPointerUp(0));
        driver.perform(Arrays.asList(tap));
    }
    // Tap on element by coordinates -> x, y
    public void tap(int x, int y){
        PointerInput touch = new
PointerInput(PointerInput.Kind.TOUCH, "finger");
        Sequence tap = new Sequence(touch, 0);

        tap.addAction(touch.createPointerMove(Duration.Z
        ERO, PointerInput.Origin.viewport(), x, y));
        tap.addAction(touch.createPointerDown(0));
        tap.addAction(touch.createPointerUp(0));
        driver.perform(Arrays.asList(tap));
    }
    // Drag and Drop by source and target Element
    public void dragAndDrop(WebElement source,
WebElement target){
        PointerInput touch = new
PointerInput(PointerInput.Kind.TOUCH, "finger");
        Sequence dragAndDrop = new Sequence(touch, 0);

        dragAndDrop.addAction(touch.createPointerMove(Du
```

```java
            ration.ZERO,
            PointerInput.Origin.fromElement(source), 0, 0));
            dragAndDrop.addAction(touch.createPointerDown(0)
            );
            dragAndDrop.addAction(touch.createPointerMove(Du
            ration.ofMillis(1000),
            PointerInput.Origin.fromElement(target), 0, 0));
            dragAndDrop.addAction(touch.createPointerUp(0));
            driver.perform(Arrays.asList(dragAndDrop));
    }
    // Drag and drop by Cordinates
    public void dragAndDrop(int srcx, int srcy, int
trgx, int trgy){
            PointerInput touch = new
PointerInput(PointerInput.Kind.TOUCH, "finger");
        Sequence dragAndDrop = new Sequence(touch, 0);

            dragAndDrop.addAction(touch.createPointerMove(Du
            ration.ZERO, PointerInput.Origin.viewport(),
            srcx, srcy));
            dragAndDrop.addAction(touch.createPointerDown(0)
            );
            dragAndDrop.addAction(touch.createPointerMove(Du
            ration.ofMillis(1000),
            PointerInput.Origin.viewport(), trgx, trgy));
            dragAndDrop.addAction(touch.createPointerUp(0));
            driver.perform(Arrays.asList(dragAndDrop));
    }
    // Long press on Element
    public void longPress(WebElement ele, int
durationInSeconds){
```

```java
        PointerInput touch = new
PointerInput(PointerInput.Kind.TOUCH, "finger");
        Sequence longPress = new Sequence(touch, 0);
        longPress.addAction(touch.createPointerMove(Dura
        tion.ZERO, PointerInput.Origin.fromElement(ele),
        0, 0));
        longPress.addAction(touch.createPointerDown(0));
        longPress.addAction(touch.createPointerMove(Dura
        tion.ofSeconds(durationInSeconds),
        PointerInput.Origin.fromElement(ele), 0, 0));
        longPress.addAction(touch.createPointerUp(0));
        driver.perform(Arrays.asList(longPress));
    }
}
```

**Script in TapTest.java:**

```java
package actionsFramework.tests;
import actionsFramework.utility.TouchActionsApi;
import org.openqa.selenium.remote.DesiredCapabilities;
public class TapTest{
    public static void main(String[] args) throw
InterruptedException{
        TouchActionsApi action = new TouchActionsApi();
        DesiredCapabilities dc = new
DesiredCapabilities();
        dc.setCapabilities("deviceName", "appDevice");
        dc.setCapabilities("udid", "emulator-5554");
        dc.setCapabilities("platformName", "Android");
        dc.setCapabilities("platformVersion", "14");
        dc.setCapabilities("automationName",
"UiAutomator2");
        // Open the APK info app to get the information
```

```java
        dc.setCapabilities("appPackage",
"io.appium.android.apis");
        dc.setCapabilities("appActivity",
"io.appium.android.apis.ApiDemos");

/* Drag and drop the apkinfo apk from laptop to Emulator
Copy the above capabilities in the appium Inspector ->
Capability Builder -> In the command Prompt -> start the
server by typing 'appium' -> Start Session
*/
        URL url = new URL("http://127.0.0.1:4723");
        AndroidDriver driver = new AndroidDriver(url,
dc);
        System.out.println("Application Started. . .");

        TouchActionsApi action = new
TouchActionsApi(driver);
// Copy the xpath from Selected Element
        WebElement tapElement =
driver.findElement(By.xpath("//android.widget. . . "));

        action.tap(tapElement);
        action.tap(driver.findElement(By.xpath("//androi
    d.widget. . .")));

        int x = 106;
        int y = 603;
        Thread.sleep(3000);
        action.tap(x, y);

        // For performing Drag and Drop
```

```java
    WebElement src =
driver.findElement(By.id("io.appium.android.apis:id/
drag_dot_1"));
    WebElement trg =
driver.findElement(By.id("io.appium.android.apis:id/
drag_dot_2"));
    action.dragAndDrop(src, trg);
    WebElement result =
driver.findElement(By.id("io.appium.android.apis:id/
drag_result_text"));
    if(result.getText().equals("Dropped!")){
        System.out.println("Test Passed:
Dropped.");
    }else{
        System.out.println("Test Failed:
Dropped.");
    }

    // For performing Drag and Drop by Cordinates
    int srcx = 203;
    int srcy = 622;
    int trgx = 622;
    int trgy = 627;
    action.dragAndDrop(srcx, srcy, trgx, trgy);
    WebElement result =
driver.findElement(By.id("io.appium.android.apis:id/
drag_result_text"));
    if(result.getText().equals("Dropped!")){
        System.out.println("Test Passed:
Dropped.");
    }else{
```

```java
            System.out.println("Test Failed:
    Dropped.");
        }


    }
}
```

**Script in LongPressTest.java:**
```java
package actionsFramework.tests;
import org.openqa.selenium.remote.DesiredCapabilities;
public class LongPressTest{
    public static void main(String[] args) throws
MalformedURLException{
        DesiredCapabilities dc = new
DesiredCapabilities();
        dc.setCapabilities("deviceName", "appDevice");
        dc.setCapabilities("udid", "emulator-5554");
        dc.setCapabilities("platformName", "Android");
        dc.setCapabilities("platformVersion", "14");
        dc.setCapabilities("automationName",
"UiAutomator2");
        URL url = new URL("http://127.0.0.1:4723");
        AndroidDriver driver = new AndroidDriver(url,
dc);
        System.out.println("Application Started. . .");

        WebElement chromeele =
driver.findElement(By.xpath("//android.widget.TextView[@
content-desc=\"Chrome\"]"));
        TouchActionsApi action = new
TouchActionsApi(driver);
        action.longPress(chromeele, 1);
    }
```

}