M. Zain 9025
BSIT (5th Sem)

**Q: Android SDK:**

Android SDK is a packaged zip file. It contains a debugger, libraries, an emulator, documentation, sample code and tutorials.

**Q: xml code for button**

```
<Button
android: layout_width = "fill_parent"
android: Layout_height = "wrap_content"
android: Text = "Hello Button" />
```

**Q Fragment vs Activity**

The main difference between activities and fragments is that when an activity goes into the background, the activity is placed in the Back Stack. This allows the activity to be resumed when user press the

Back button. Fragments are not automatically placed in the back stack when they do into the background. In order to place a Fragment into the back stack you explicitly need to call addToBackStack( ) method.

## Q: Component of Intent Object

Intent Object consists of

- Action
- Data
- Type
- Catogery

## Q: Absolute Layout XML code

```
<AbsoluteLayout
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    xmlns:android="http://schemas.android.com
                   /apk/res/android" >

</AbsoluteLayout>
```

Q Java code for obtaining current date and time

```
public void onClick (View view) {

    Toast.makeText (getBaseContext(),
        "Time Selected:" +
        timePicker.getCurrentHour() + ":" +
        timePicker.getCurrenteMinute(),
        Toast.LENGTH_SHORT).show();

}

import java.time.format.DateTimeFormatter;
import java.time.LocalDateTime;
public class CurrentDateTime {
    public static void main(String[] arg
    DateTimeFormatter dtf = DateTimeFormater.
                pattern("yyyy/MM/dd

LocalDateTime now = LocalDateTime.now();
System.out.println( dtf.format(now));
}
}
```

## Q: 2-Methods for option menu

Two methods for option menu
=> onCreateOptionMenu()
=> onOptionsItemSelected()

## Long Questions

### Activity Life Cycle:-

The activity base class defines a series of events that governs the life cycle of an activity.
Following are the events that occurs during the life cycle of an activity

**onCreate()** - called when activity is first created

**onStart()** - called when activity becomes visible to user

**onResume()** - called when activity starts interacting with the user

onPause() - called when current activity is being paused and the previous activity is being resumed

onStop() - called when activity is no longer to the user

onDestroy() - called before the activity is destroyed by the system

onRestart() - called when the activity has been stopped and is restarting again

## Q: Android Stack / Architecture

The Android OS is divided into five sections

> Linux Kernal =>

This is the Kernal on which Android is based. This layer contains all the low level device drivers for various hardware components of an Android device

> Libraries =>

These contains all the code that provides the main feature of an Android OS.

For example:

the SQL lite library provides database support

the webkit library provides support for web browsing

> Android Runtime =>

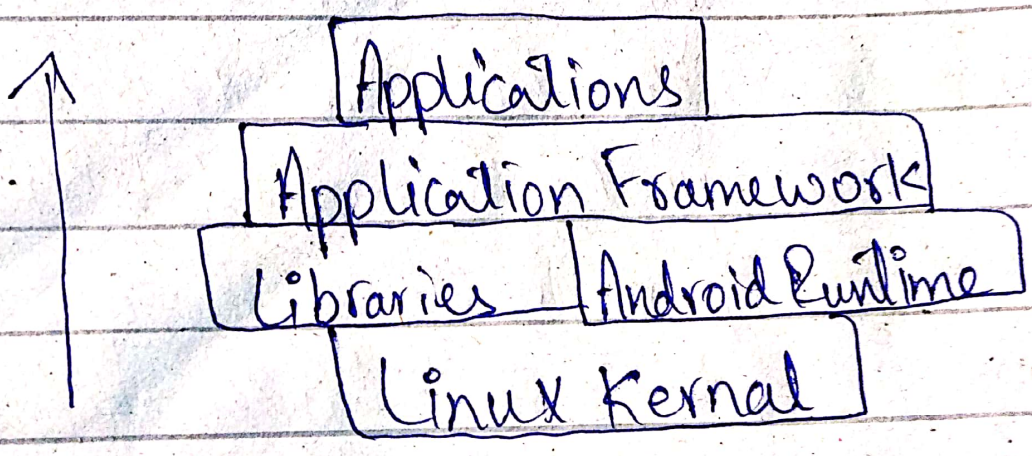
At the same layer of Libraries, the Android runtime provids a set of core libraries that enable developers to write Android Apps using Java Programming language. The Android runtime also includes Dalvik Virtual Machine, which enables every Android Application to run in its own process, with its own instance of the Dalvik Virtual Machine.

> Application Framework =>

Exposes the various capabilities of the Android OS to application developers so that they can make use of them in their applications

> Applications =>

This is the top layer of Android Architecture, it contains application that ships with the Android device, as well as the applications we download and install from for Android Market



## Q. Frame Layout with XML Code

The Frame layout is a place holder on screen that you can use to display a single view.

Views that you add to a FrameLayout are always anchored to the top left of the layout.

Example XML Code {Image View inside Frame Layout}

```
<FramLayout
    android:layout_width = "wrap content"
    android:layout_height = "wrap content"
android:layout_alignLeft = "@+id/lblComments"
android:layout_below = "@+id/lblComments"
android:layout_centerHorizontal = "true">
    <Image view
        android:src = "@drawable/droid"
android:layout_width = "wrap content"
android:layout_height = "wrap content" />

</FrameLayout>
```