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| A picture containing drawing, stop, room  Description automatically generated | **Advanced Mobile Programming**  **Practical #1** | | |
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| **Name** | **Aniket Gupta** | **Roll Number** | **21302B0053** |
| **Subject/Course:** | **Advanced Mobile Programming** | | |
| **Topic** | **Introduction to Android, Introduction to Android Studio IDE, Application Fundamentals** | | |
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| **Basic Program** | | | |
| **1.a) Design a simple “Hello World” Program.**  **package** com.example.pratical\_01  **import** android.support.v7.app.AppCompatActivity **import** android.os.Bundle  **class** MainActivity : AppCompatActivity() {  **override fun** onCreate(savedInstanceState: Bundle?) {  **super**.onCreate(savedInstanceState)  setContentView(R.layout.*activity\_main*)  } } | | | |
| **Broadcast Receiver** | | | |
| **1.b) Write a program to implement Broadcast Receiver.** | | | |
| Main file:  package com.example.bcastreciever    import android.content.BroadcastReceiver  import android.content.Intent  import android.content.IntentFilter  import android.support.v7.app.AppCompatActivity  import android.os.Bundle    class MainActivity : AppCompatActivity() {   lateinit var receiver: Airplane   override fun onCreate(savedInstanceState: Bundle?) {   super.onCreate(savedInstanceState)   setContentView(R.layout.*activity\_main*)   receiver=Airplane()   IntentFilter(Intent.*ACTION\_AIRPLANE\_MODE\_CHANGED*).*also* **{**  registerReceiver(receiver,**it**)   **}**  }     override fun onStop() {   super.onStop()   unregisterReceiver(receiver)   }  }  Airplane.kt file:  package com.example.bcastreciever    import android.content.BroadcastReceiver  import android.content.Context  import android.content.Intent  import android.widget.Toast    class Airplane : BroadcastReceiver() {   override fun onReceive(p0: Context?, p1: Intent?) {   val isAirplaneEnabled = p1?.getBooleanExtra("state", false) ?:return     if(isAirplaneEnabled)   {   Toast.makeText(p0, "Airplane Mode Enabled", Toast.*LENGTH\_LONG*).show()   }   else{   Toast.makeText(p0, "Airplane Mode Disabled", Toast.*LENGTH\_LONG*).show()   }   }  }  XML File:  *<?*xml version="1.0" encoding="utf-8"*?>*  <android.support.constraint.ConstraintLayout xmlns:android="<http://schemas.android.com/>apk/res/android"   xmlns:app="<http://schemas.android.com/>apk/res-auto"   xmlns:tools="[http://schemas.android.com/tools"](http://schemas.android.com/tools%22)   android:layout\_width="match\_parent"   android:layout\_height="match\_parent"   tools:context=".MainActivity">     <TextView   android:layout\_width="wrap\_content"   android:layout\_height="wrap\_content"   android:text="Airplane Mode"   app:layout\_constraintBottom\_toBottomOf="parent"   app:layout\_constraintEnd\_toEndOf="parent"   app:layout\_constraintStart\_toStartOf="parent"   app:layout\_constraintTop\_toTopOf="parent" />    </android.support.constraint.ConstraintLayout> | | | |