Slip no – 18

Q1. Create an Android Application that Demonstrate Alert Dialog Box.

activity\_main.xml

<?*xml version*="1.0" *encoding*="utf-8"?>  
<LinearLayout  
 *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"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:orientation*="vertical"  
 *tools:context*=".MainActivity">  
  
 <TextView  
 *android:id*="@+id/textView"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:text*="Hello World!"/>  
  
</LinearLayout>

MainActivity.java

*package* com.example.slipno5;  
  
*import* android.content.*DialogInterface*;  
*import* android.os.Bundle;  
*import* android.widget.Toast;  
  
*import* androidx.appcompat.app.AlertDialog;  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*public class* MainActivity *extends* AppCompatActivity {  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 *//Single button dialog box* AlertDialog alertDialog = *new* AlertDialog.Builder(*this*).create();  
 alertDialog.setTitle("Terms & Condition");  
 alertDialog.setMessage("Have you read all the terms and conditions?");  
  
 alertDialog.setButton(*DialogInterface*.***BUTTON\_POSITIVE***, "Yes", *new DialogInterface*.OnClickListener() {  
 @Override  
 *public void* onClick(*DialogInterface* dialogInterface, *int* i) {  
 Toast.*makeText*(MainActivity.*this*, "Yes, You Can Proceed now", Toast.***LENGTH\_SHORT***).show();  
 }  
 });  
  
 alertDialog.show();  
 }  
}

Q2. Create an Android Application that produce Notification.

* Open your AndroidManifest.xml file and add the ResultActivity declaration within code.

<uses-permission android:name="android.permission.POST\_NOTIFICATIONS" />

<application

<!-- Other application configurations -->

<activity android:name=".ResultActivity"/>

</application>

* These code add into strings.xml these file already exist under the value folder.

<string name="channel\_name">Notification Channel Name</string>

<string name="channel\_description">Notification Channel Description</string>

activity\_main.xml

<?*xml version*="1.0" *encoding*="utf-8"?>  
<RelativeLayout *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *xmlns:tools*="http://schemas.android.com/tools"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:padding*="16dp"  
 *tools:context*=".MainActivity">  
  
 <Button  
 *android:id*="@+id/button"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:text*="Show Notification"  
 *android:layout\_centerInParent*="true"/>  
  
</RelativeLayout>

MainActivity.java

*package* com.example.activitylifecycle;  
  
*import* android.app.NotificationChannel;  
*import* android.app.NotificationManager;  
*import* android.app.PendingIntent;  
*import* android.content.Context;  
*import* android.content.Intent;  
*import* android.os.Build;  
*import* android.os.Bundle;  
*import* android.view.View;  
*import* android.widget.Button;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
*import* androidx.core.app.NotificationCompat;  
  
*public class* MainActivity *extends* AppCompatActivity {  
  
 *private static final int* ***NOTIFICATION\_ID*** = 1;  
 *private static final* String ***CHANNEL\_ID*** = "MyChannel";  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 createNotificationChannel();  
  
 Button button = findViewById(R.id.*button*);  
 button.setOnClickListener(*new* View.OnClickListener() {  
 @Override  
 *public void* onClick(View v) {  
 showNotification();  
 }  
 });  
 }  
  
 *private void* createNotificationChannel() {  
 *if* (Build.VERSION.***SDK\_INT*** >= Build.VERSION\_CODES.***O***) {  
 *CharSequence* name = getString(R.string.*channel\_name*);  
 String description = getString(R.string.*channel\_description*);  
 *int* importance = NotificationManager.***IMPORTANCE\_DEFAULT***;  
 NotificationChannel channel = *new* NotificationChannel(***CHANNEL\_ID***, name, importance);  
 channel.setDescription(description);  
 NotificationManager notificationManager = getSystemService(NotificationManager.*class*);  
 notificationManager.createNotificationChannel(channel);  
 }  
 }  
  
 *private void* showNotification() {  
 NotificationCompat.Builder builder = *new* NotificationCompat.Builder(*this*, ***CHANNEL\_ID***)  
 .setSmallIcon(R.drawable.*ic\_launcher\_background*)  
 .setContentTitle("Notifications Example")  
 .setContentText("This is a notification message")  
 .setPriority(NotificationCompat.***PRIORITY\_DEFAULT***);  
  
 Intent notificationIntent = *new* Intent(*this*, ResultActivity.*class*);  
 notificationIntent.putExtra("message", "This is a notification message");  
 PendingIntent pendingIntent = PendingIntent.*getActivity*(*this*, 0, notificationIntent, PendingIntent.***FLAG\_IMMUTABLE***);  
 builder.setContentIntent(pendingIntent);  
  
 NotificationManager notificationManager = getSystemService(NotificationManager.*class*);  
 notificationManager.notify(***NOTIFICATION\_ID***, builder.build());  
 }  
}

ResultActivity.java

*package* com.example.activitylifecycle;  
  
*import* androidx.appcompat.app.AppCompatActivity;  
  
*import* android.os.Bundle;  
*import* android.widget.TextView;  
  
*public class* ResultActivity *extends* AppCompatActivity {  
  
 @Override  
 *protected void* onCreate(Bundle savedInstanceState) {  
 *super*.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_result*);  
  
 TextView textView = findViewById(R.id.*textView*);  
 String message = getIntent().getStringExtra("message");  
 textView.setText(message);  
 }  
}

activity\_result.xml

<?*xml version*="1.0" *encoding*="utf-8"?>  
<RelativeLayout *xmlns:android*="http://schemas.android.com/apk/res/android"  
 *xmlns:tools*="http://schemas.android.com/tools"  
 *android:layout\_width*="match\_parent"  
 *android:layout\_height*="match\_parent"  
 *android:padding*="16dp"  
 *tools:context*=".ResultActivity">  
  
 <TextView  
 *android:id*="@+id/textView"  
 *android:layout\_width*="wrap\_content"  
 *android:layout\_height*="wrap\_content"  
 *android:text*="Result Message"  
 *android:layout\_centerInParent*="true"/>  
  
</RelativeLayout>