**Q.1.Inbox Notification**

Xml file:

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.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"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/btnShowInboxNotification"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Show Inbox Notification"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

Java file:

package com.example.inbox\_notification;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.app.NotificationCompat;  
import androidx.core.app.NotificationManagerCompat;  
  
import android.app.Notification;  
import android.app.NotificationChannel;  
import android.app.NotificationManager;  
import android.content.Context;  
import android.graphics.Color;  
import android.os.Build;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
public class MainActivity extends AppCompatActivity {  
 private Button btnShowInboxNotification;  
 private final String CHANNEL\_ID = "inbox\_notification\_channel";  
 private final int NOTIFICATION\_ID = 1;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 Button btnShowInboxNotification = findViewById(R.id.*btnShowInboxNotification*);  
  
 btnShowInboxNotification.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 showInboxNotification();  
 }  
 });  
 createNotificationChannel();  
 }  
 private void createNotificationChannel(){  
 if (Build.VERSION.*SDK\_INT* >= Build.VERSION\_CODES.*O*) {  
 CharSequence name = "Inbox Notification Channel";  
 String description = "Channel for displaying inbox notifications";  
 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 showInboxNotification(){  
 NotificationCompat.Builder builder = new NotificationCompat.Builder(this, CHANNEL\_ID)  
 .setSmallIcon(R.drawable.*ic\_inbox\_notification*)  
 .setContentTitle("Inbox Notification")  
 .setContentText("You have new messages")  
 .setStyle(new NotificationCompat.InboxStyle()  
 .addLine("Message 1")  
 .addLine("Message 2")  
 .addLine("Message 3")  
 .setBigContentTitle("New Messages"))  
 .setPriority(NotificationCompat.*PRIORITY\_DEFAULT*)  
 .setAutoCancel(true);  
  
 NotificationManagerCompat notificationManager = NotificationManagerCompat.*from*(this);  
 notificationManager.notify(NOTIFICATION\_ID, builder.build());  
 }  
}

**Q.2.Toast Notification**

Xml file:

*<?*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"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/btnShowToast"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Show Toast"  
 android:layout\_centerInParent="true" />  
  
</RelativeLayout>

Java file:

package com.example.toast\_notification;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 private Button btnShowToast;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 Button btnShowToast = findViewById(R.id.*btnShowToast*);  
 btnShowToast.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 showToast();  
 */\*Toast.makeText(MainActivity.this, "This is a Toast Notification", Toast.LENGTH\_SHORT).show();  
 \*/*}  
 });  
 }  
 private void showToast(){  
 Toast.*makeText*(MainActivity.this, "This is a Toast Notification", Toast.*LENGTH\_SHORT*).show();  
 }  
}

**Q.3.Dialogue Notification**

Xml file:

*<?*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"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/btnShowNotification"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Show Dialogue Notification"  
 android:layout\_centerInParent="true" />  
  
</RelativeLayout>

Java file:

package com.example.dialogue\_notification;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.app.NotificationCompat;  
import androidx.core.app.NotificationManagerCompat;  
  
import android.app.NotificationChannel;  
import android.app.NotificationManager;  
import android.os.Build;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
public class MainActivity extends AppCompatActivity {  
 private final String CHANNEL\_ID = "notification\_channel";  
 private final int NOTIFICATION\_ID = 1;  
 Button btnShowNotification;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 Button btnShowNotification =findViewById(R.id.*btnShowNotification*);  
  
 btnShowNotification.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 showNotification();  
 }  
 });  
 createNotificationChannel();  
 }  
 private void createNotificationChannel(){  
 if (Build.VERSION.*SDK\_INT* >= Build.VERSION\_CODES.*O*) {  
 CharSequence name = "Notification Channel";  
 String description = "Channel for displaying notifications";  
 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\_notification*)  
 .setContentTitle("Dialog Notification")  
 .setContentText("This is a simple dialogue notification.")  
 .setPriority(NotificationCompat.*PRIORITY\_DEFAULT*);  
  
 NotificationManagerCompat notificationManager = NotificationManagerCompat.*from*(this);  
 notificationManager.notify(NOTIFICATION\_ID, builder.build());  
  
 }  
}

**Q.4.Status Notification**

Xml file:

*<?*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"  
 tools:context=".MainActivity">  
  
 <Button  
 android:id="@+id/btnShowNotification"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Show Status Notification"  
 android:layout\_centerInParent="true" />  
  
</RelativeLayout>

Java file:

package com.example.status\_notification;  
  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.app.NotificationCompat;  
import androidx.core.app.NotificationManagerCompat;  
  
import android.app.NotificationChannel;  
import android.app.NotificationManager;  
import android.os.Build;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
  
public class MainActivity extends AppCompatActivity {  
  
 private Button btnShowNotification;  
 private final String CHANNEL\_ID = "status\_notification\_channel";  
 private final int NOTIFICATION\_ID = 1;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_main);  
 Button btnShowNotification = findViewById(R.id.btnShowNotification);  
  
 btnShowNotification.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 showStatusNotification();  
 }  
 });  
 createNotificationChannel();  
 }  
 private void createNotificationChannel(){  
 if(Build.VERSION.SDK\_INT >= Build.VERSION\_CODES.O) {  
 CharSequence name = "Status Notification Channel";  
 String description = "Channel for displaying status notifications";  
 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 showStatusNotification(){  
 NotificationCompat.Builder builder = new NotificationCompat.Builder(this, CHANNEL\_ID)  
 .setSmallIcon(R.drawable.ic\_status\_notification)  
 .setContentTitle("Status Notification")  
 .setContentText("This is a simple status notification.")  
 .setPriority(NotificationCompat.*PRIORITY\_DEFAULT*)  
 .setAutoCancel(true);  
  
 NotificationManagerCompat notificationManager = NotificationManagerCompat.*from*(this);  
 notificationManager.notify(NOTIFICATION\_ID, builder.build());  
   
 }  
}