

EX:NO:08

ALERT DIALOG BOX

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AIM:-

Implement an application to display the alert box message.

PROCEDURE:-

Step 1: Declare permissions.

Step 2: Create broadcast receiver.

Step 3: Handle SMS reception.

Step 4: Display Alert Dialog.

PRGRAM CODE:-

AndroidManifest.xml:

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.smsalert">

    <uses-permission android:name="android.permission.RECEIVE_SMS" />
    <uses-permission android:name="android.permission.READ_SMS" />

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/AppTheme">
```

```
<activity android:name=".MainActivity">
    <intent-filter>
        <action android:name="android.intent.action.MAIN" />
        <category android:name="android.intent.category.LAUNCHER" />
    </intent-filter>
</activity>
<receiver
    android:name=".SmsReceiver"
    android:enabled="true"
    android:exported="true">
    <intent-filter android:priority="999">
        <action android:name="android.provider.Telephony.SMS_RECEIVED" />
    </intent-filter>
</receiver>
</application>
</manifest>
```

MainActivity.kt:

```
package com.example.smsalert

import android.os.Bundle
import androidx.appcompat.app.AppCompatActivity

class MainActivity : AppCompatActivity() {
    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
```

```
        setContentView(R.layout.activity_main)
    }
}
```

SmsReceiver.kt:

```
package com.example.smsalert

import android.content.BroadcastReceiver
import android.content.Context
import android.content.Intent
import android.os.Build
import android.os.Bundle
import android.provider.Telephony
import android.telephony.SmsMessage
import androidx.appcompat.app.AlertDialog

class SmsReceiver : BroadcastReceiver() {

    override fun onReceive(context: Context, intent: Intent) {

        if (intent.action == Telephony.Sms.Intents.SMS_RECEIVED_ACTION) {

            val bundle = intent.extras

            if (bundle != null) {

                val pdus = bundle.get("pdus") as Array<Any>

                for (pdu in pdus) {

                    val smsMessage: SmsMessage = if (Build.VERSION.SDK_INT >=
Build.VERSION_CODES.M) {
```

```
        SmsMessage.createFromPdu(pdu as ByteArray,  
bundle.getString("format"))
```

```
    } else {
```

```
        SmsMessage.createFromPdu(pdu as ByteArray)
```

```
    }
```

```
    val sender = smsMessage.originatingAddress
```

```
    val message = smsMessage.messageBody
```

```
    showSmsAlert(context, sender, message)
```

```
    }
```

```
    }
```

```
    }
```

```
}
```

```
private fun showSmsAlert(context: Context, sender: String?, message: String?) {
```

```
    val alertDialogBuilder = AlertDialog.Builder(context)
```

```
    alertDialogBuilder.setTitle("New SMS Received")
```

```
    alertDialogBuilder.setMessage("From: $sender\nMessage: $message")
```

```
    alertDialogBuilder.setPositiveButton("OK") { dialog, which ->
```

```
        // Action to perform when OK button is clicked
```

```
        dialog.dismiss()
```

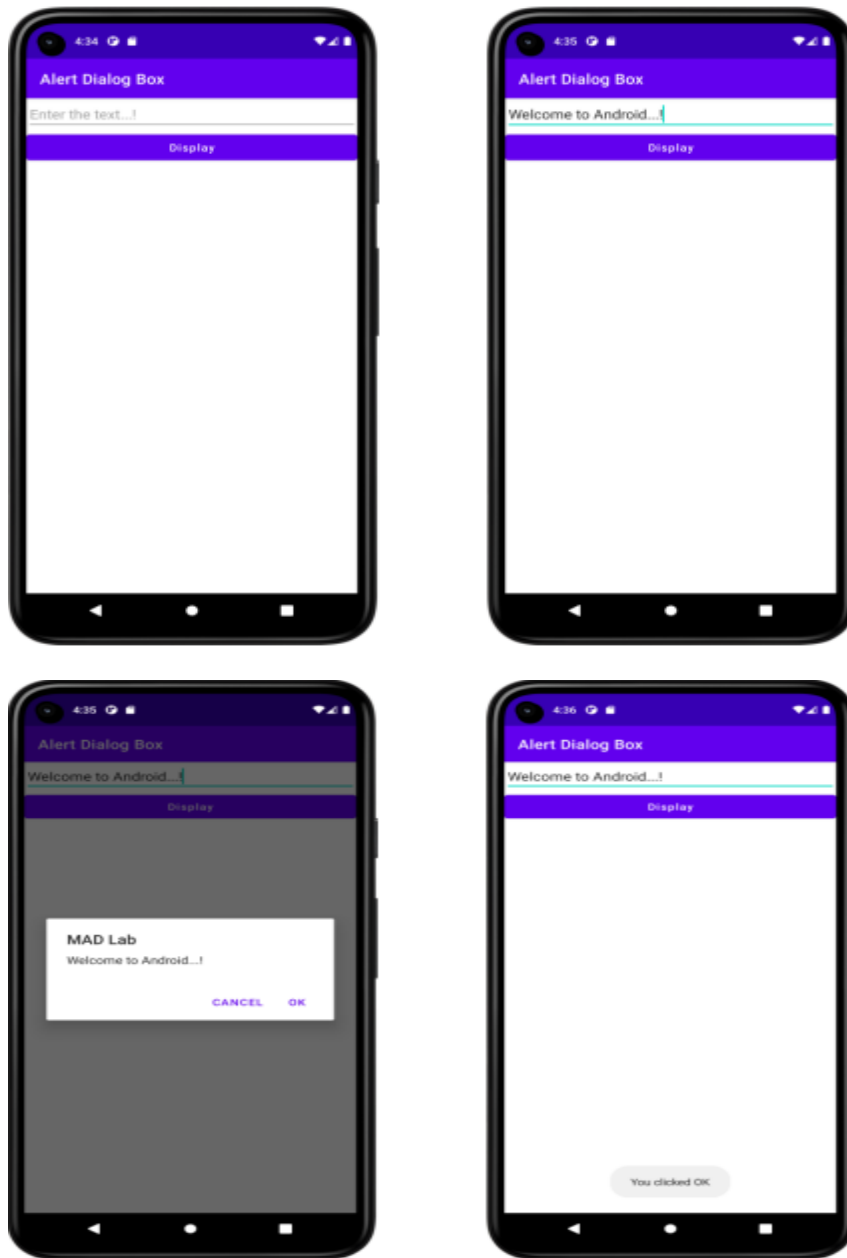
```
    }
```

```
    val alertDialog = alertDialogBuilder.create()
```

```
    alertDialog.show()
```

```
}}
```

OUTPUT:-



RESULT:-

Thus to implement an application to display the alert box message is implemented and executed successfully.