EX NO:9

DATE:

ALARM

AIM:

Write a mobile application to set the alarm using android Alarm Manager class.

PROCEDURE:

- Open Android Studio and import the package
- In activity_main.xml drag and drop the buttons
- The button needs to perform actions to change the colour, font size and background colour
- Click android virtual device that should control the toolbar
- Design the graphical layout with the textview and buttons
- Run the application
- The version of android and name is displayed
- The theme of the file is also mentioned in a file
- Run the file using the version which is displayed to the users.

PROGRAM CODE:

AndroidManifest.xml:

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.example.alarmclock">
<uses-permission android:name="com.android.alarm.permission.SET_ALARM" />
<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="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=".AlarmReceiver" />
</application>
</manifest>
```

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
```

```xml
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".MainActivity">
<Button
android:id="@+id/buttonSetAlarm"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Set Alarm"
android:layout_centerInParent="true"
android:onClick="setAlarm" />
</RelativeLayout>
```

MainActivity.kt:

```kotlin
package com.example.alarmclock
import android.app.AlarmManager
import android.app.PendingIntent
import android.content.Context
import android.content.Intent
import android.os.Bundle
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
class MainActivity : AppCompatActivity() {
override fun onCreate(savedInstanceState: Bundle?) {
super.onCreate(savedInstanceState)
setContentView(R.layout.activity_main)
}
fun setAlarm(view: android.view.View) {
val alarmManager = getSystemService(Context.ALARM_SERVICE) as AlarmManager
val alarmIntent = Intent(this, AlarmReceiver::class.java).let { intent ->
PendingIntent.getBroadcast(this, 0, intent, 0)
}
val timeInterval = 10 * 60 * 1000 // 10 minutes in milliseconds
alarmManager.setRepeating(
AlarmManager.RTC_WAKEUP,
System.currentTimeMillis() + timeInterval,
timeInterval.toLong(),
alarmIntent
)
Toast.makeText(this, "Alarm set successfully", Toast.LENGTH_SHORT).show()
}
}
```

AlarmReceiver.kt:

```kotlin
package com.example.alarmclock
import android.content.BroadcastReceiver
import android.content.Context
import android.content.Intent
```
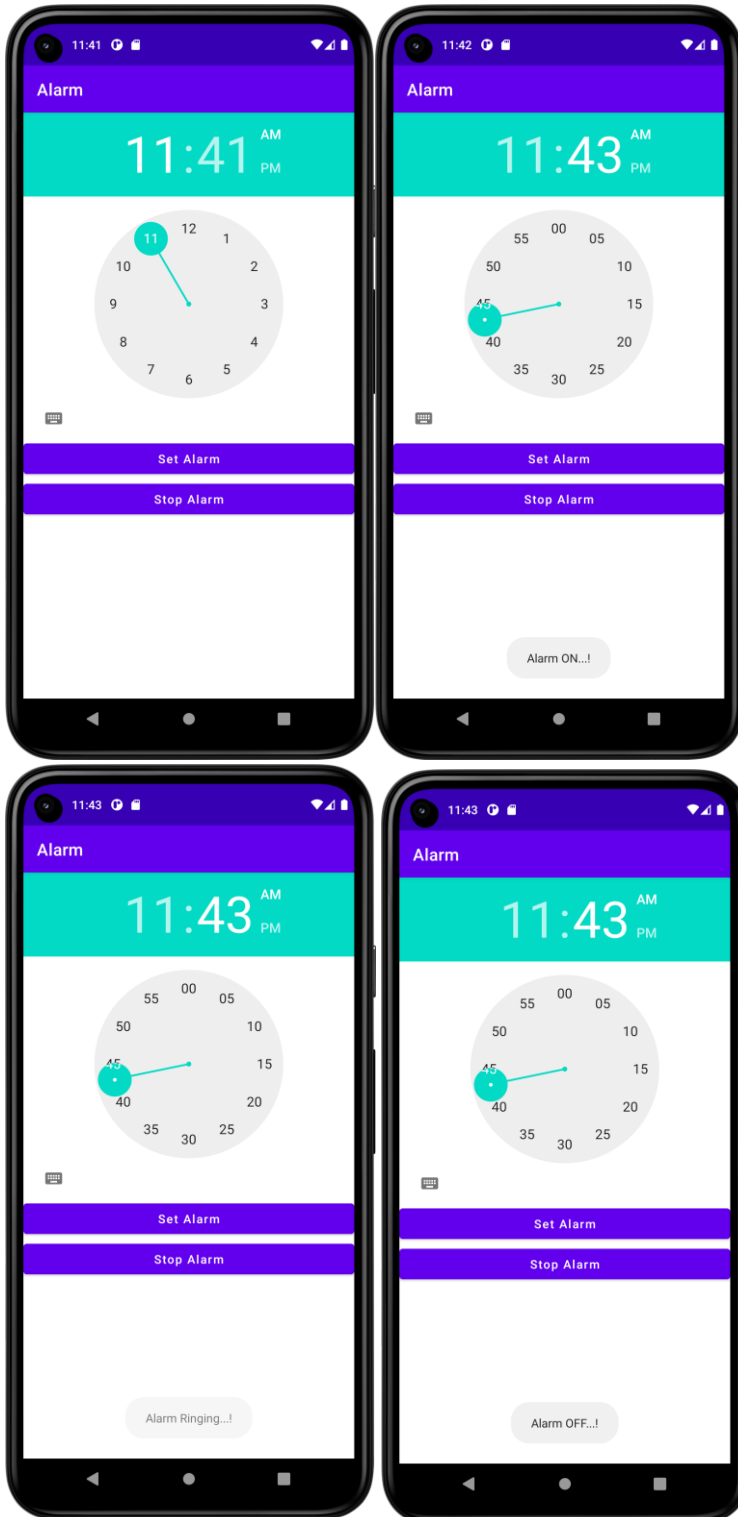
```
import android.widget.Toast
class AlarmReceiver : BroadcastReceiver() {
override fun onReceive(context: Context, intent: Intent) {
Toast.makeText(context, "Alarm! Snooze for 10 minutes", Toast.LENGTH_SHORT).show()
}
}
```

OUTPUT:

RESULT: