Practical No 16

```
1.Activity_main.xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
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">
    <TextView
        android:id="@+id/textView1"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout_above="@+id/button1"
        android:layout_alignParentStart="true"
        android:layout_alignParentLeft="true"
        android:layout_marginStart="36dp"
        android:layout marginLeft="36dp"
        android:layout_marginBottom="34dp"
        android:text="" />
    <Button
        android:id="@+id/button1"
        android:layout width="wrap content"
        android:layout_height="wrap_content"
        android:layout_alignParentBottom="true"
        android:layout_centerHorizontal="true"
        android:layout_marginBottom="20dp"
        android:text="Change Time" />
    <TimePicker
        android:id="@+id/timePicker"
        android:layout_width="390dp"
        android:layout_height="446dp"
        android:layout_above="@+id/textView1"
        android:layout centerHorizontal="true"
```

android:layout_marginBottom="35dp" />

</RelativeLayout>



Mainactivity.java

```
package com.example.timepicker;
import androidx.appcompat.app.AppCompatActivity;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.TimePicker;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    TextView textview1;
    TimePicker timepicker;
    Button changetime;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        textview1=(TextView)findViewById(R.id.textView1);
        timepicker=(TimePicker)findViewById(R.id.timePicker);
        //Uncomment the below line of code for 24 hour view
        timepicker.setIs24HourView(true);
        changetime=(Button)findViewById(R.id.button1);
       textview1.setText(getCurrentTime());
        changetime.setOnClickListener(new View.OnClickListener()
            @Override
            public void onClick(View view) {
                textview1.setText(getCurrentTime());
        });
    }
    public String getCurrentTime(){
        String currentTime="Current Time:
"+timepicker.getCurrentHour()+":"+timepicker.getCurrentMinute();
        return currentTime;
}
```

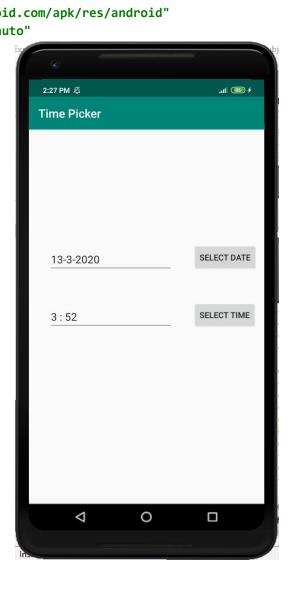


Practical No 16

2. Select date and time

</AbsoluteLayout>

```
<?xml version="1.0" encoding="utf-8"?>
<absoluteLayout 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">
    <EditText
        android:id="@+id/timeText"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:layout x="34dp"
        android:layout y="297dp"
        android:ems="10"
        android:inputType="text" />
    <Button
        android:id="@+id/timebtn"
        android:layout width="wrap content"
        android:layout height="wrap content"
        android:layout_x="279dp"
        android:layout_y="292dp"
        android:text="Select Time" />
    <EditText
        android:id="@+id/dateText"
        android:layout_width="wrap_content"
        android:layout height="wrap content"
        android:layout_x="34dp"
        android:layout_y="199dp"
        android:ems="10"
        android:inputType="text" />
    <Button
        android:id="@+id/datebtn"
        android:layout_width="wrap_content"
        android:layout height="wrap content"
        android:layout x="279dp"
        android:layout_y="194dp"
        android:text="Select Date" />
```



MainActivity.java

```
package com.example.timepicker;
import androidx.appcompat.app.AppCompatActivity;
import android.app.DatePickerDialog;
import android.app.DialogFragment;
import android.app.TimePickerDialog;
import android.os.Bundle;
import android.widget.TimePicker;
public class MainActivity extends AppCompatActivity implements
DatePickerDialog.OnDateSetListener{
    int mYear, mMonth, mDay, mHour, mMin;
    EditText txtdate, txttime;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        txtdate = (EditText)findViewById(R.id.dateText);
        txttime = (EditText)findViewById(R.id.timeText);
        Button btdate = (Button)findViewById(R.id.datebtn);
        Button bttime = (Button)findViewById(R.id.timebtn);
        btdate.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                showDatePickerDialog();
        });
        bttime.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                DialogFragment newFragment = new TimePickerFragment();
                newFragment.show(getFragmentManager(), "TimePicker");
            }
        });
    }
    private void showDatePickerDialog() {
        DatePickerDialog datePickerDialog = new DatePickerDialog(this, this,
                Calendar.getInstance().get(Calendar.YEAR),
                Calendar.getInstance().get(Calendar.MONTH),
                Calendar.getInstance().get(Calendar.DAY_OF_MONTH));
        datePickerDialog.show();
    }
    @Override
    public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {
        month = month + 1;
        String date = dayOfMonth + "-" + month + "-" + year;
        txtdate.setText(date);
    }
}
```

TimePickerFragment.java

```
package com.example.timepicker;
import android.app.TimePickerDialog;
import android.os.Bundle;
import android.app.Fragment;
import android.text.format.DateFormat;
import android.widget.EditText;
import android.widget.TextView;
import android.app.DialogFragment;
import android.app.Dialog;
import java.util.Calendar;
import android.widget.TimePicker;
public class TimePickerFragment extends DialogFragment implements
TimePickerDialog.OnTimeSetListener{
    @Override
    public Dialog onCreateDialog(Bundle savedInstanceState){
        final Calendar c = Calendar.getInstance();
        int hour = c.get(Calendar.HOUR_OF_DAY);
        int minute = c.get(Calendar.MINUTE);
        return new TimePickerDialog(getActivity(),this, hour, minute,
                DateFormat.is24HourFormat(getActivity()));
    }
    public void onTimeSet(TimePicker view, int hourOfDay, int minute){
        EditText tv = (EditText) getActivity().findViewById(R.id.timeText);
        tv.setText(String.valueOf(hourOfDay) + " : " + String.valueOf(minute));
    }
}
```