Practical No 23

X.1

Program

• XML File:

```
<?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:id="@+id/activity_main"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical"
android:background="#FFF9C4">
<ImageView
android:layout_width="fill_parent"
android:layout_height="300dp"
android:layout_centerHorizontal="true"
android:id="@+id/imageView"/>
<Button
android:text=" capture "
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_gravity="center"
android:id="@+id/button"/>
</LinearLayout>
```

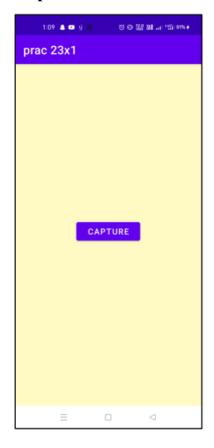
• JAVA File:

```
package com.example.prac23x1;
import android. Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.graphics.Bitmap;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
public class MainActivity extends AppCompatActivity {
Button button;
ImageView imageView;
Intent intent;
public static final int RequestPermissionCode = 1;
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
button = (Button)findViewById(R.id.button);
imageView = (ImageView)findViewById(R.id.imageView);
EnableRuntimePermission();
button.setOnClickListener(new View.OnClickListener() {
@Override
```

```
public void onClick(View view) {
intent = new
Intent(android.provider.MediaStore.ACTION_IMAGE_CAPTURE);
startActivityForResult(intent, 7);
}
});
}
protected void onActivityResult(int requestCode, int resultCode, Intent
data) {
super.onActivityResult(requestCode, resultCode, data);
if (requestCode == 7 && resultCode == RESULT_OK) {
Bitmap bitmap = (Bitmap) data.getExtras().get("data");
imageView.setImageBitmap(bitmap);
}
public void EnableRuntimePermission(){
if
(ActivityCompat.shouldShowRequestPermissionRationale(MainActivity.thi
S,
Manifest.permission.CAMERA))
{
Toast.makeText(MainActivity.this, "CAMERA permission allows us
to Access CAMERA app", Toast.LENGTH_LONG).show();
} else {
ActivityCompat.requestPermissions(MainActivity.this,new
String[]{
Manifest.permission.CAMERA}, RequestPermissionCode);
}
```

```
}
@Override
public void onRequestPermissionsResult(int RC, String per[], int[]
PResult) {
super.onRequestPermissionsResult(RC, per, PResult);
switch (RC) {
case RequestPermissionCode:
if (PResult.length > 0 && PResult[0] ==
Package Manager. PERMISSION\_GRANTED) \ \{
Toast.makeText(MainActivity.this, "Permission Granted,
Now your application can access CAMERA.",
Toast.LENGTH_LONG).show();
} else {
Toast.makeText(MainActivity.this, "Permission Canceled,
Now your application cannot access CAMERA.",
Toast.LENGTH_LONG).show();
}
break;
}
}
}
```

• Output:





X.2

• Program

• XML File:

```
<?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:id="@+id/activity_main"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical"
android:background="#FFF9C4">
<ImageView</pre>
```

```
android:layout_width="fill_parent"
android:layout_height="300dp"
android:layout_centerHorizontal="true"
android:id="@+id/imageView"/>
<Button
android:text=" capture video "
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_gravity="center"
android:id="@+id/button"/>
</LinearLayout>
```

• JAVA File:

```
package com.example.prac23x2;
import android. Manifest;
import android.content.Intent;
import android.content.pm.PackageManager;
import android.graphics.Bitmap;
import android.os.Bundle;
import android.provider.MediaStore;
import android.view.View;
import android.widget.Button;
import android.widget.ImageView;
import android.widget.Toast;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
public class MainActivity extends AppCompatActivity {
Button button:
ImageView imageView;
Intent intent;
public static final int RequestPermissionCode = 1 ;
```

```
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
button = (Button)findViewById(R.id.button);
imageView = (ImageView)findViewById(R.id.imageView);
EnableRuntimePermission();
button.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View view) {
intent = new Intent(MediaStore.ACTION_VIDEO_CAPTURE);
startActivityForResult(intent, 7);
});
}
protected void onActivityResult(int requestCode, int resultCode, Intent
data) {
super.onActivityResult(requestCode, resultCode, data);
if (requestCode == 7 && resultCode == RESULT_OK) {
Bitmap bitmap = (Bitmap) data.getExtras().get("data");
imageView.setImageBitmap(bitmap);
}
public void EnableRuntimePermission(){
(ActivityCompat.shouldShowRequestPermissionRationale(MainActivity.thi
Manifest.permission.CAMERA))
Toast.makeText(MainActivity.this,"CAMERA permission allows us
to Access CAMERA app", Toast.LENGTH_LONG).show();
} else {
ActivityCompat.requestPermissions(MainActivity.this,new
String[]{
```

```
Manifest.permission.CAMERA}, RequestPermissionCode);
}
}
@Override
public void onRequestPermissionsResult(int RC, String per[], int[]
PResult) {
super.onRequestPermissionsResult(RC, per, PResult);
switch (RC) {
case RequestPermissionCode:
if (PResult.length > 0 && PResult[0] ==
PackageManager.PERMISSION_GRANTED) {
Toast.makeText(MainActivity.this, "Permission Granted,
Now your application can access CAMERA.",
Toast.LENGTH_LONG).show();
} else {
Toast.makeText(MainActivity.this, "Permission Canceled,
Now your application cannot access CAMERA.",
Toast.LENGTH_LONG).show();
}
break;
}
}
}
```

• Output:



