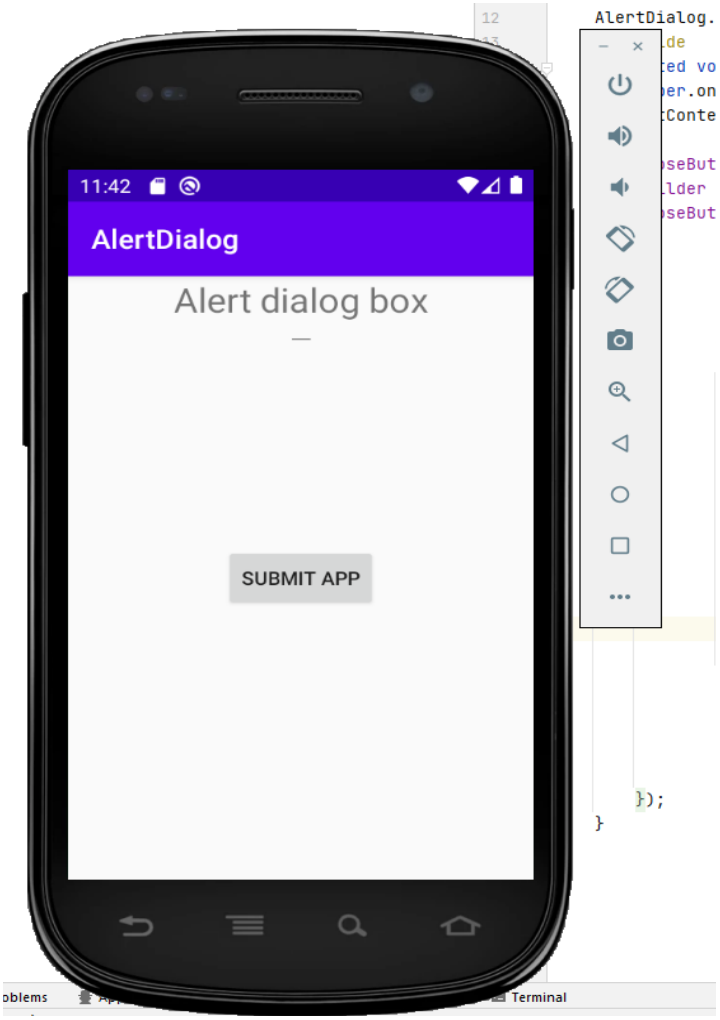
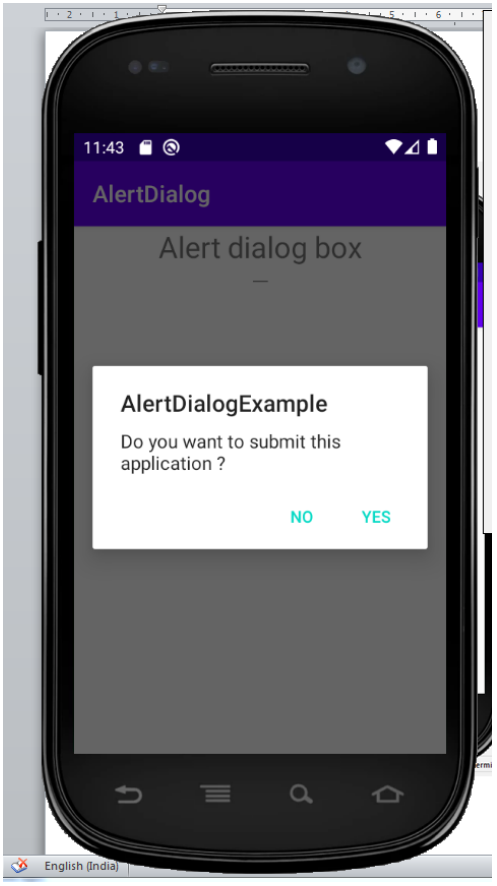
Alert Dialog :






```
<?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"
    >
    <TextView
        android:id="@+id/textView1"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:gravity="center_horizontal"
        android:textSize="25dp"
        android:text="Alert dialog box"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

    <EditText
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:textAppearance="?android:attr/textAppearanceSmall"
        android:textSize="25dp"
        app:layout_constraintEnd_toEndOf="parent"
```

```
        app:layout_constraintStart_toStartOf="parent"
        tools:layout_editor_absoluteY="172dp" />

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/button"
        android:text="Submit app"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout >
```

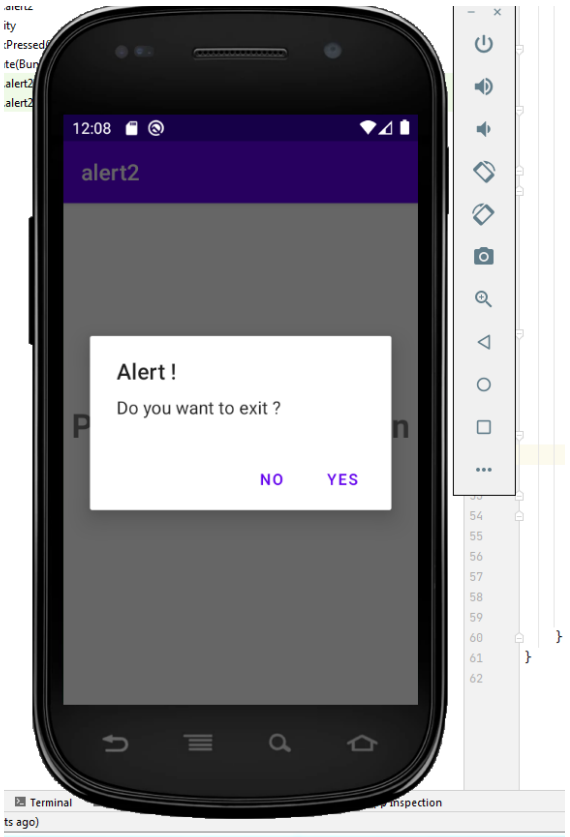
String.xml

```
<resources>
    <string name="app_name">AlertDialog</string>
    <string name="dialog_message">Welcome to Alert Dialog</string>
    <string name="dialog_title">Say Hello to Alert Dialog</string>
</resources>
```

.java code

```
package com.example.alert;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.content.DialogInterface;
import android.view.View;
import android.widget.Button;
import android.app.AlertDialog;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    Button closeButton;
    AlertDialog.Builder builder;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        closeButton = (Button) findViewById(R.id.button);
        builder = new AlertDialog.Builder(this);
        closeButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {

                //Uncomment the below code to Set the message and title
from the strings.xml file
                builder.setMessage(R.string.dialog_message)
.setTitle(R.string.dialog_title);

                //Setting message manually and performing action on button
click
```

```
                builder.setMessage("Do you want to submit this application
?")
                        .setCancelable(false)
                        .setPositiveButton("Yes", new
DialogInterface.OnClickListener() {
                            public void onClick(DialogInterface dialog, int
id) {
                                finish();
                                Toast.makeText(getApplicationContext(),"you
choose yes action for alertbox",
                                        Toast.LENGTH_SHORT).show();
                            }
                        })
                        .setNegativeButton("No", new
DialogInterface.OnClickListener() {
                            public void onClick(DialogInterface dialog, int
id) {
                                //  Action for 'NO' Button
                                 dialog.cancel();
                                Toast.makeText(getApplicationContext(),"you
choose no action for alertbox",
                                        Toast.LENGTH_SHORT).show();
                            }
                        });
                //Creating dialog box
                AlertDialog alert = builder.create();
                //Setting the title manually
                alert.setTitle("AlertDialogExample");
                alert.show();
            }
        });
    }
}
```

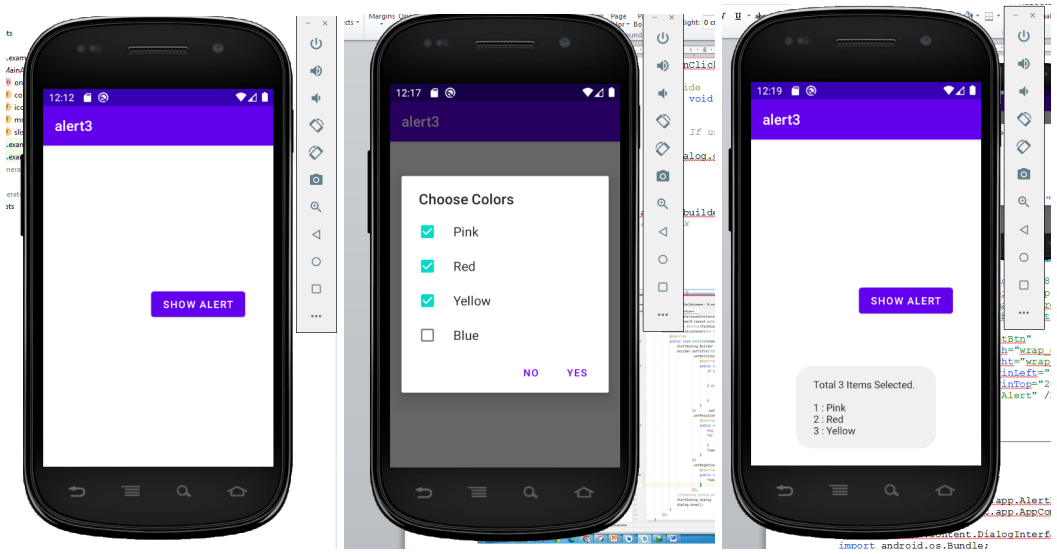



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Press The Back Button of Your Phone."
        android:textStyle="bold"
        android:textSize="30dp"
        android:gravity="center_horizontal"
        android:layout_marginTop="180dp"
        />

</RelativeLayout>
```

```
package com.example.alert2;
import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.content.DialogInterface;
public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
```

```
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }

    // Declare the onBackPressed method
    // when the back button is pressed
    // this method will call
    @Override
  public void onBackPressed()
    {

        // Create the object of AlertDialog Builder class
        AlertDialog.Builder builder = new
AlertDialog.Builder(MainActivity.this);
        // Set the message show for the Alert time
        builder.setMessage("Do you want to exit ?");
        // Set Alert Title
        builder.setTitle("Alert !");
        // Set Cancelable false  for when the user clicks on the outside
the Dialog Box then it will remain show
        builder.setCancelable(false);
        // Set the positive button with yes name  OnClickListener method is
use of DialogInterface interface.
        builder.setPositiveButton("Yes",new
DialogInterface.OnClickListener() {
                            @Override
                            public void onClick(DialogInterface dialog,int
which)
                            {
                                // When the user click yes button then app
will close
                                 finish();
                            }
                        });

        // Set the Negative button with No name OnClickListener method is
use of DialogInterface interface.
        builder
                .setNegativeButton(
                        "No",
                        new DialogInterface
                                .OnClickListener() {

                            @Override
                            public void onClick(DialogInterface dialog,
                                                int which)
                            {
                                // If user click no then dialog box is
canceled.
                                 dialog.cancel();
                            }
                        });

        // Create the Alert dialog
        AlertDialog alertDialog = builder.create();
       // Show the Alert Dialog box
        alertDialog.show();
```

```
    }
}
```



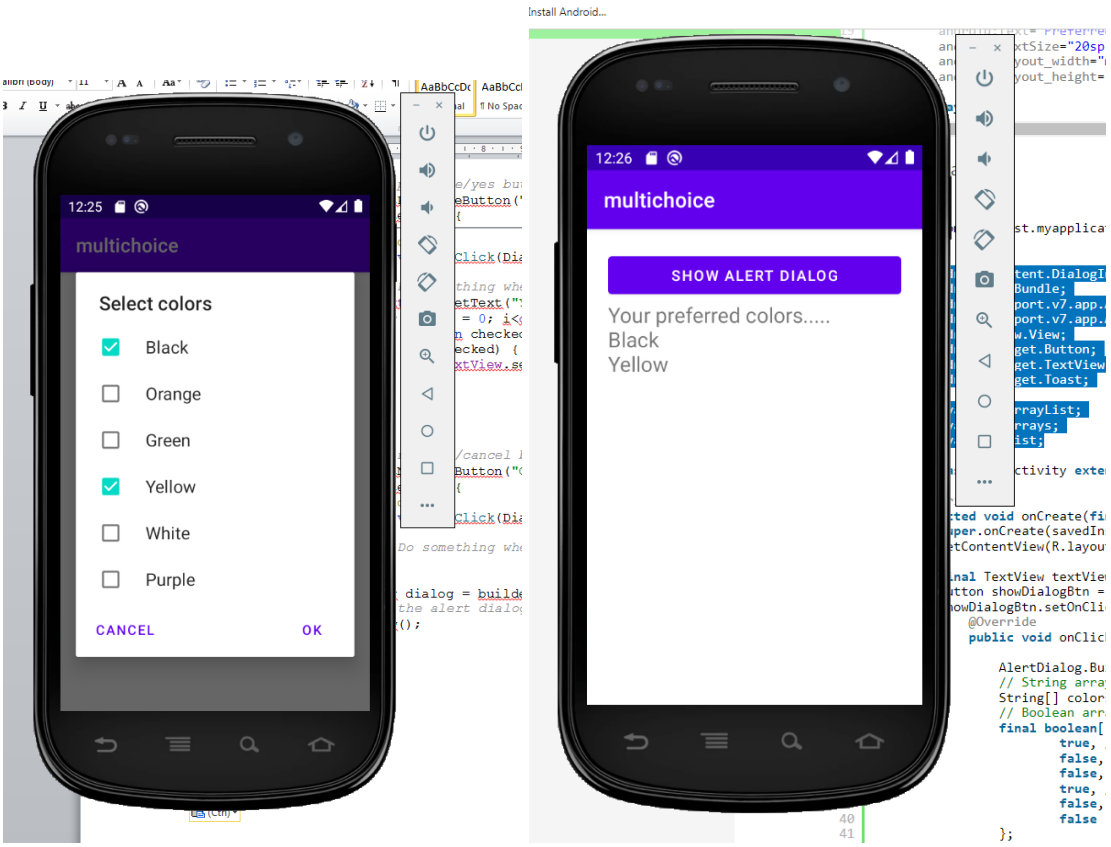

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent" android:layout_height="match_parent">
    <Button
        android:id="@+id/getBtn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="150dp"
        android:layout_marginTop="200dp"
        android:text="Show Alert" />
</RelativeLayout>
```

```java
package com.example.alert3;

import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

import android.content.DialogInterface;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;

import java.util.ArrayList;

public class MainActivity extends AppCompatActivity {

    final CharSequence[] colors = { "Pink", "Red", "Yellow", "Blue" };
```

```
    ArrayList<Integer> slist = new ArrayList();
    boolean icount[] = new boolean[colors.length];
    String msg ="";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Button btn = (Button)findViewById(R.id.getBtn);
        btn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                AlertDialog.Builder builder = new
AlertDialog.Builder(MainActivity.this);
                builder.setTitle("Choose Colors")
                        .setMultiChoiceItems(colors,icount, new
DialogInterface.OnMultiChoiceClickListener() {
                            @Override
                            public void onClick(DialogInterface arg0, int
arg1, boolean arg2) {
                                if (arg2) {
                                    // If user select a item then add it in
selected items
                                     slist.add(arg1);
                                } else if (slist.contains(arg1)) {
                                    // if the item is already selected then
remove it
                                     slist.remove(Integer.valueOf(arg1));
                                }
                            }
                        })      .setCancelable(false)
                        .setPositiveButton("Yes", new
DialogInterface.OnClickListener() {
                            @Override
                            public void onClick(DialogInterface dialog, int
which) {
                                msg = "";
                                for (int i = 0; i < slist.size(); i++) {
                                    msg = msg + "\n" + (i + 1) + " : " +
colors[slist.get(i)];
                                }
                                Toast.makeText(getApplicationContext(),
"Total " + slist.size() + " Items Selected.\n" + msg,
Toast.LENGTH_SHORT).show();
                            }
                        })
                        .setNegativeButton("No", new
DialogInterface.OnClickListener() {
                            @Override
                            public void onClick(DialogInterface dialog, int
which) {
                                Toast.makeText(MainActivity.this,"No Option
Selected",Toast.LENGTH_SHORT).show();
                            }
                        });
                //Creating dialog box
                 AlertDialog dialog  = builder.create();
                dialog.show();
            }
```

```
        });
    }
}
```

Example 4:

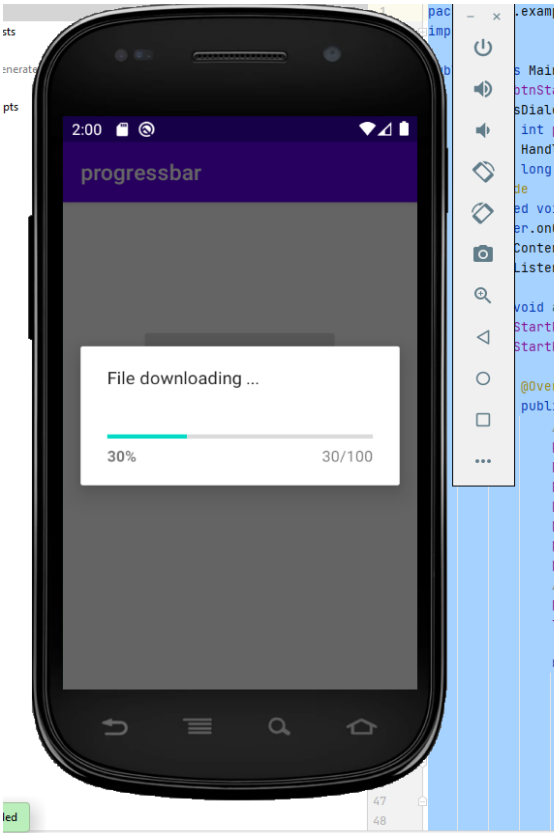



```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:padding="20dp"
android:orientation="vertical"
tools:context=".MainActivity">

<Button
    android:id="@+id/showsnackbarbtn"
    android:text="Show Alert Dialog"
    android:layout_width="match_parent"
    android:layout_height="wrap_content" />

<TextView
```

```
    android:id="@+id/txtView"
    android:text="Preferred colors"
    android:textSize="20sp"
    android:layout_width="match_parent"
    android:layout_height="wrap_content" />

</LinearLayout>


package com.example.multichoice;

import android.content.DialogInterface;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
import android.widget.Toast;

import androidx.appcompat.app.AlertDialog;
import androidx.appcompat.app.AppCompatActivity;

import java.util.Arrays;
import java.util.List;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(final Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        final TextView textView = findViewById(R.id.txtView);
        Button showDialogBtn = findViewById(R.id.showsnackbarbtn);
        showDialogBtn.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {

                AlertDialog.Builder builder = new
AlertDialog.Builder(MainActivity.this);
                // String array for alert dialog multi choice items
                String[] colorsArray = new String[]{"Black", "Orange",
"Green", "Yellow", "White", "Purple"};
                // Boolean array for initial selected items
                final boolean[] checkedColorsArray = new boolean[]{
                        true, // Black checked
                        false, // Orange
                        false, // Green
                        true, // Yellow checked
                        false, // White
                        false  //Purple
                };
                // Convert the color array to list
                final List<String> colorsList = Arrays.asList(colorsArray);
                //setTitle
                builder.setTitle("Select colors");
                //set multichoice
                builder.setMultiChoiceItems(colorsArray, checkedColorsArray,
new DialogInterface.OnMultiChoiceClickListener() {
```

```
                    @Override
                    public void onClick(DialogInterface dialog, int which,
boolean isChecked) {
                        // Update the current focused item's checked status
                        checkedColorsArray[which] = isChecked;
                        // Get the current focused item
                        String currentItem = colorsList.get(which);
                        // Notify the current action
                        Toast.makeText(getApplicationContext(), currentItem
+ " " + isChecked, Toast.LENGTH_SHORT).show();
                    }
                });
                // Set the positive/yes button click listener
                builder.setPositiveButton("OK", new
DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialog, int which) {
                        // Do something when click positive button
                        textView.setText("Your preferred colors..... \n");
                        for (int i = 0; i<checkedColorsArray.length; i++){
                            boolean checked = checkedColorsArray[i];
                            if (checked) {
                                textView.setText(textView.getText() +
colorsList.get(i) + "\n");
                            }
                        }
                    }
                });
                // Set the neutral/cancel button click listener
                builder.setNeutralButton("Cancel", new
DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialog, int which) {
                        // Do something when click the neutral button
                    }
                });
                AlertDialog dialog = builder.create();
                // Display the alert dialog on interface
                dialog.show();

            }
        });


    }



}
```

progress Bar

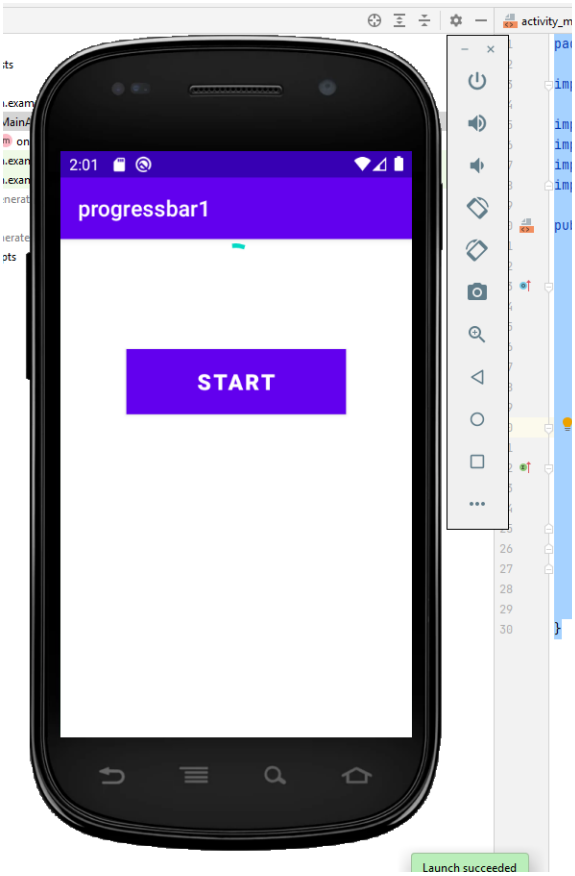



```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="10dp"
    android:paddingRight="10dp">
    <Button
```

```
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="116dp"
        android:text="Movie Download file" />

</RelativeLayout>


package com.example.progressbar;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.app.ProgressDialog;
import android.os.Handler;

import android.view.View;
import android.widget.Button;

public class MainActivity extends AppCompatActivity {
    Button btnStartProgress;
    ProgressDialog progressBar;
    private int progressBarStatus = 0;
    private Handler progressBarHandler = new Handler();
    private long fileSize = 0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        addListenerOnButtonClick();
    }
    public void addListenerOnButtonClick() {
        btnStartProgress = findViewById(R.id.button1);
        btnStartProgress.setOnClickListener(new View.OnClickListener(){

            @Override
            public void onClick(View v) {
                // creating progress bar dialog
                progressBar = new ProgressDialog(v.getContext());
                progressBar.setCancelable(true);
                progressBar.setMessage("File downloading ...");

progressBar.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
                progressBar.setProgress(0);
                progressBar.setMax(100);
                progressBar.show();
                //reset progress bar and filesize status
                progressBarStatus = 0;
                fileSize = 0;

                new Thread(new Runnable() {
                    public void run() {
                        while (progressBarStatus < 100) {
                            // performing operation
                            progressBarStatus = doOperation();
                            try {
                                Thread.sleep(1000);
```

```
                            } catch (InterruptedException e) {
                                e.printStackTrace();
                            }
                            // Updating the progress bar
                            progressBarHandler.post(new Runnable() {
                                public void run() {

progressBar.setProgress(progressBarStatus);
                                }
                            });
                        }
                        // performing operation if file is downloaded,
                        if (progressBarStatus >= 100) {
                            // sleeping for 1 second after operation
completed
                            try {
                                Thread.sleep(1000);
                            } catch (InterruptedException e) {
                                e.printStackTrace();
                            }
                            // close the progress bar dialog
                            progressBar.dismiss();
                        }
                    }
                }).start();
            }//end of onClick method
        });
    }
    // checking how much file is downloaded and updating the filesize
    public int doOperation() {
        //The range of ProgressDialog starts from 0 to 10000
        while (fileSize <= 10000) {
            fileSize++;
            if (fileSize == 1000) {
                return 10;
            } else if (fileSize == 2000) {
                return 20;
            } else if (fileSize == 3000) {
                return 30;
            } else if (fileSize == 4000) {
                return 40; // you can add more else if
            }
         /* else {
                return 100;
            }*/
        }//end of while
        return 100;
    }//end of doOperation
}
```

example 2




```
<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">

    <ProgressBar
        android:id="@+id/simpleProgressBar"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:visibility="invisible"
        android:layout_centerHorizontal="true"/>

    <Button
        android:id="@+id/startButton"
        android:layout_width="200dp"
        android:layout_height="wrap_content"
        android:text="Start"
        android:textSize="20sp"
        android:textStyle="bold"
        android:layout_centerHorizontal="true"
        android:layout_marginTop="100dp"
        android:padding="10dp"
        android:background="#0f0"
        android:textColor="#fff"/>

</RelativeLayout>
package com.example.progressbar1;
```

```
import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.ProgressBar;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        // initiate progress bar and start button
        final ProgressBar simpleProgressBar = (ProgressBar)
findViewById(R.id.simpleProgressBar);
        Button startButton = (Button) findViewById(R.id.startButton);
        // perform click event on button
        startButton.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                // visible the progress bar
                simpleProgressBar.setVisibility(View.VISIBLE);
            }
        });
    }


}
```