Develop an android application to show some categories such as education, entertainment, health, provisions etc., If the user clicks on any one of the items it should show the sub categories of the category and if is again clicked it should the details of those items. (Use indents and lists)

**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">  
 <ListView  
 android:id="@+id/category\_list"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:dividerHeight="2sp"  
 android:divider="@android:color/holo\_orange\_dark"/>  
</RelativeLayout>

**MainActivity.java**

package com.example.subcategorylist;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
public class MainActivity extends AppCompatActivity {  
  
 String[] items = {"Education","Entertainment","Health","Provisions"};  
 ListView listView;  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 listView = (ListView) findViewById(R.id.*category\_list*);  
 ArrayAdapter<String> myAdapter = new ArrayAdapter<String>(MainActivity.this,  
 android.R.layout.*simple\_list\_item\_1*,items);  
 listView.setAdapter(myAdapter);  
 listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {  
 @Override  
 public void onItemClick(AdapterView<?> adapterView, View view, int position, long l) {  
 Intent intent = new Intent(MainActivity.this, Sublist.class);  
 intent.putExtra("details", items[position]);  
 startActivity(intent);  
  
 }  
 });  
  
 }  
}

**activity\_sublist.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=".Sublist">  
 <ListView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/sublistview"/>  
  
</RelativeLayout>

**Sublist.java**

package com.example.subcategorylist;  
  
import androidx.appcompat.app.AppCompatActivity;  
import android.app.AlertDialog;  
import android.content.DialogInterface;  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.AdapterView;  
import android.widget.ArrayAdapter;  
import android.widget.ListView;  
  
public class Sublist extends AppCompatActivity {  
 String[] edusubCategories = {"Schools", "Colleges", "Universities"};  
 String[] entsubCategories = {"Movies", "Music", "Theater"};  
 String[] heasubCategories = {"Hospitals", "Clinics", "Pharmacies"};  
 String[] prosubCategories = {"Grocery stores", "Supermarkets", "Convenience stores"};  
  
 String[] temp;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_sublist*);  
  
 String details=getIntent().getStringExtra("details");  
 ListView mCategoryList = (ListView) findViewById(R.id.*sublistview*);  
 if(details.equals("Education"))  
 {  
 temp=edusubCategories;  
 }  
 else if(details.equals("Entertainment"))  
 {  
 temp=entsubCategories;  
 }  
 else if(details.equals("Health"))  
 {  
 temp=heasubCategories;  
 }  
 else  
 {  
 temp=prosubCategories;  
 }  
 ArrayAdapter<String> mAdapter = new ArrayAdapter<>(this, android.R.layout.*simple\_list\_item\_1*,temp);  
 mCategoryList.setAdapter(mAdapter);  
 mCategoryList.setOnItemClickListener((AdapterView<?> parent, View view, int position, long id) -> {  
 AlertDialog.Builder builder = new AlertDialog.Builder(Sublist.this);  
 builder.setTitle("DETAILS");  
 builder.setMessage("Detailed information about that.");  
 builder.setPositiveButton("Yes", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialog, int which) {  
 Intent intent = new Intent(Sublist.this,itemss.class);  
 intent.putExtra("info",temp[position]);  
 startActivity(intent);  
 }  
 });  
 builder.setNegativeButton("No", new DialogInterface.OnClickListener() {  
 @Override  
 public void onClick(DialogInterface dialog, int which) {  
 Intent intent = new Intent(Sublist.this, MainActivity.class);  
 startActivity(intent);  
 }  
 });  
  
 AlertDialog dialog = builder.create();  
 dialog.show();  
 });  
 }  
}

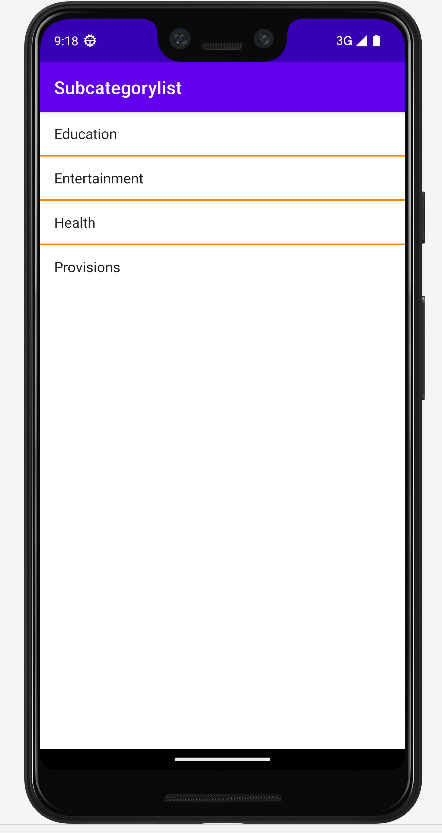
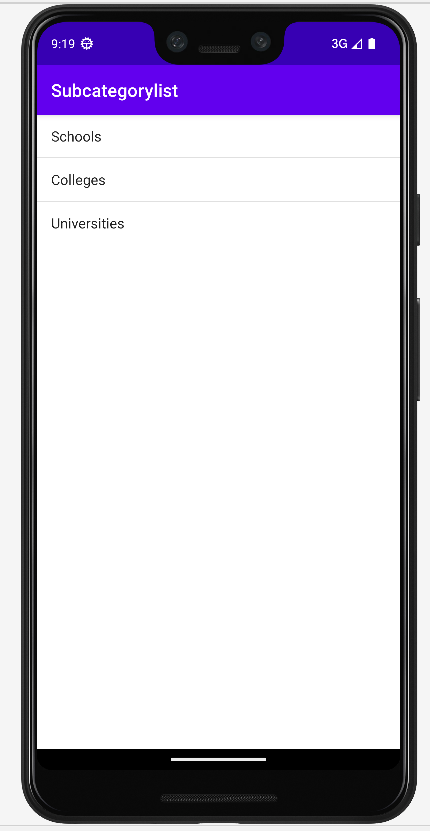
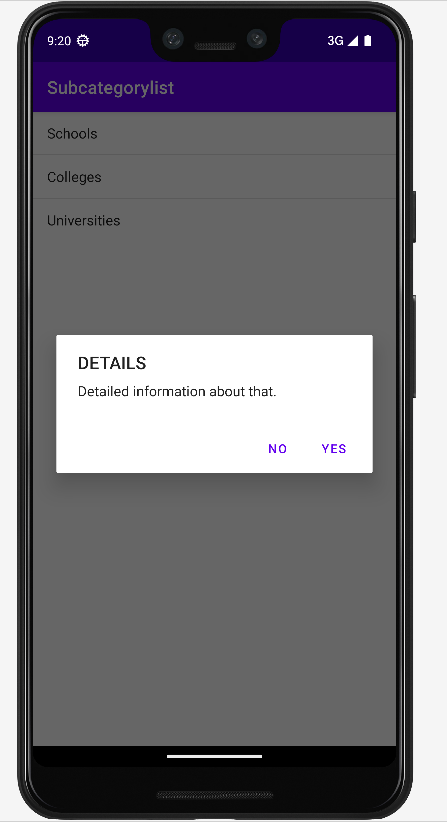
**activity\_itemss.xml**

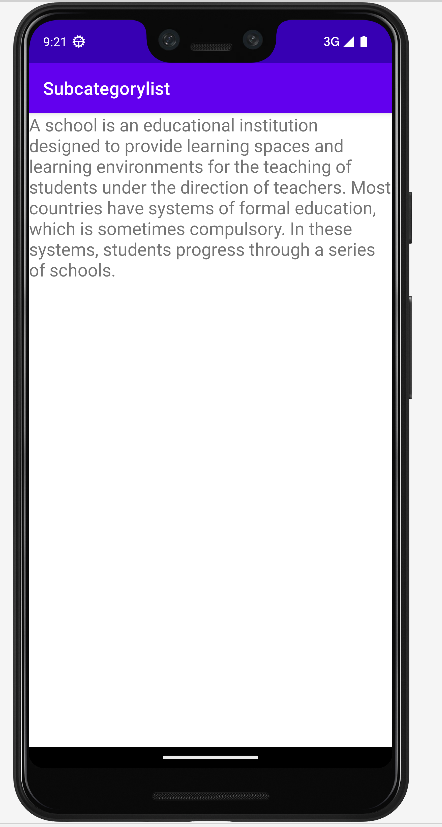
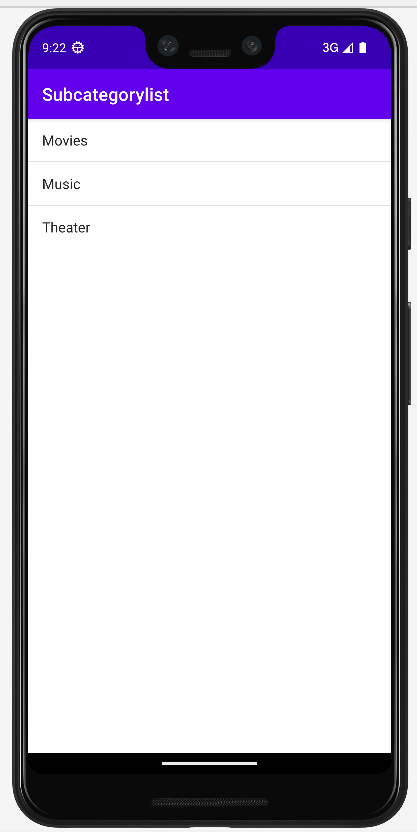
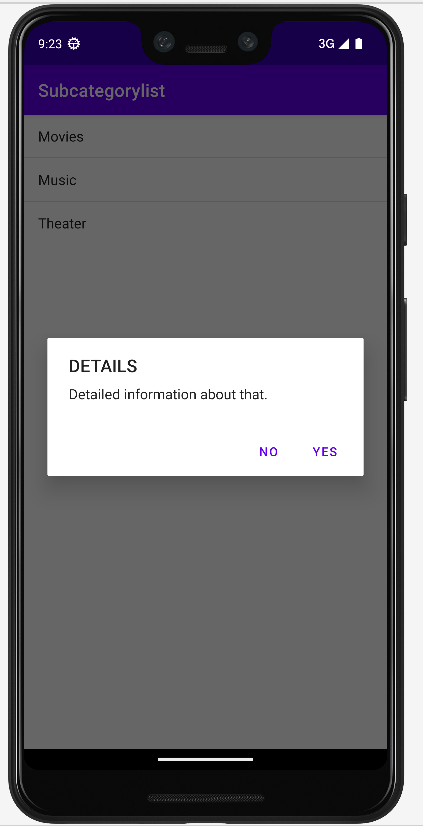
<LinearLayout  
 xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:app="http://schemas.android.com/apk/res-auto"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".itemss">  
  
  
 <TextView  
 android:id="@+id/tv"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:layout\_weight="1"  
 android:textSize="20sp" />  
</LinearLayout>

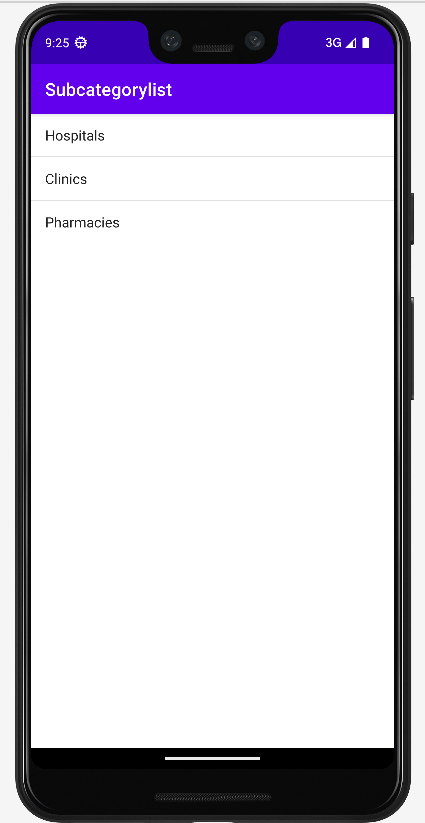
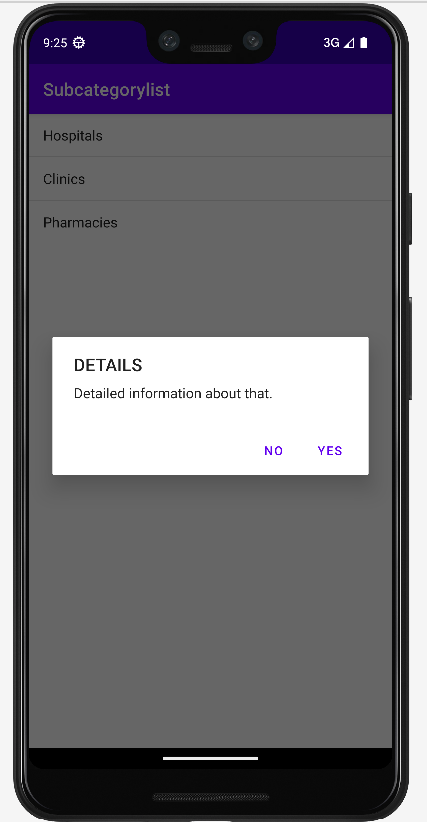
**items.java**

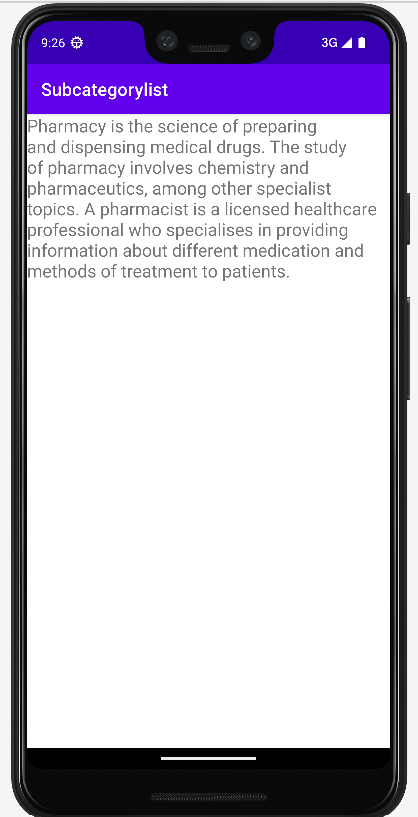
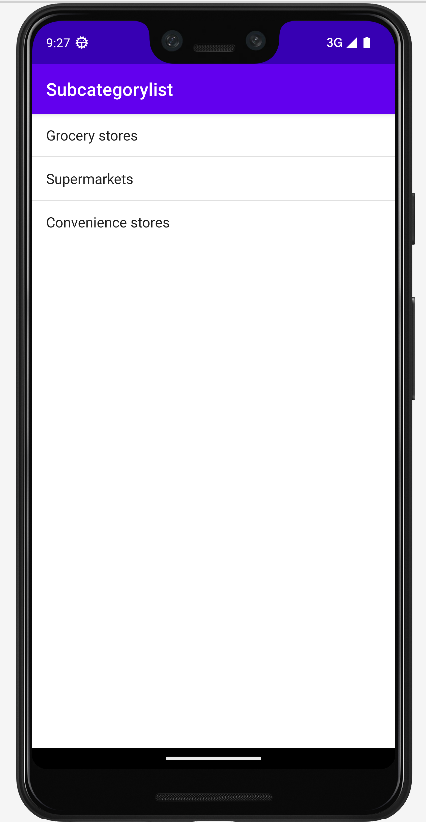
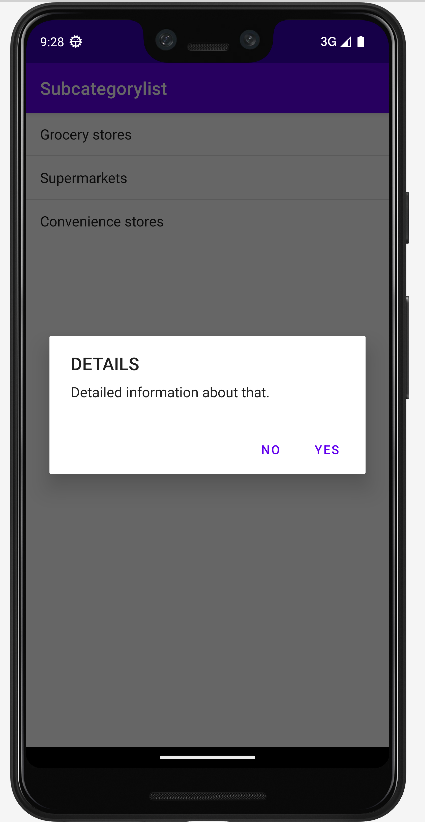
package com.example.subcategorylist;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.annotation.SuppressLint;  
import android.os.Bundle;  
  
import android.widget.TextView;  
  
public class itemss extends AppCompatActivity {  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_itemss*);  
  
 String info=getIntent().getStringExtra("info");  
  
 TextView tv=findViewById(R.id.*tv*);  
 if(info.equals("Schools"))  
 {  
 tv.setText("A school is an educational institution designed to provide learning spaces and learning environments for the teaching of students under the direction of teachers. Most countries have systems of formal education, which is sometimes compulsory. In these systems, students progress through a series of schools.");  
 }  
 else if(info.equals("Colleges"))  
 {  
 tv.setText(" college is an institution of higher education that focuses on undergraduate degree programs. That is, they may offer 2 year associates degrees or 4 year bachelor's degrees, but typically do not offer graduate level programs such as a master's degree or doctorate degree.");  
 }  
 else if(info.equals("Universities"))  
 {  
 tv.setText("A university is an institution of higher education, usually comprising a college of liberal arts and sciences and graduate and professional schools and having the authority to confer degrees in various fields of study.");  
 }  
 else if(info.equals("Movies"))  
 {  
 tv.setText("Determining the purpose or purposes behind a film can be trickier, but it is equally vital in interpreting the film's historical role. The primary purpose behind most commercial films, of course, was to make a profit, and any film that wanted to attract and keep an audience had to be appealing and entertaining.");  
 }  
 else if(info.equals("Music"))  
 {  
 tv.setText("an art of sound in time that expresses ideas and emotions in significant forms through the elements of rhythm, melody, harmony, and color. the tones or sounds employed, occurring in single line (melody) or multiple lines (harmony), and sounded or to be sounded by one or more voices or instruments, or both.");  
 }  
 else if(info.equals("Theater"))  
 {  
 tv.setText("Theatre is a collaborative art form which combines words, voice, movement and visual elements to express meaning. The field of theatre encompasses not only live improvised and scripted work, but also dramatic forms such as film, television and other electronic media.\n");  
 }  
 else if(info.equals("Hospitals"))  
 {  
 tv.setText("hospital, an institution that is built, staffed, and equipped for the diagnosis of disease; for the treatment, both medical and surgical, of the sick and the injured; and for their housing during this process. The modern hospital also often serves as a centre for investigation and for teaching.");  
 }  
 else if(info.equals("Clinics"))  
 {  
 tv.setText("A place in which outpatients are given medical treatment or advice, often connected to a hospital and a similar place staffed by physicians or surgeons specializing in one or more specific areas.");  
 }  
 else if(info.equals("Pharmacies"))  
 {  
 tv.setText("Pharmacy is the science of preparing and dispensing medical drugs. The study of pharmacy involves chemistry and pharmaceutics, among other specialist topics. A pharmacist is a licensed healthcare professional who specialises in providing information about different medication and methods of treatment to patients.");  
 }  
 else if(info.equals("Grocery stores"))  
 {  
 tv.setText("A typical grocery store sells fresh produce, meats, dairy products and, often, bakery goods alongside canned, frozen and prepared foods. In addition, a grocery store will also sell a full range of household, healthcare and personal care items.\n");  
 }  
 else if(info.equals("Supermarkets"))  
 {  
 tv.setText("supermarket, large retail store operated on a self-service basis, selling groceries, fresh produce, meat, bakery and dairy products, and sometimes an assortment of nonfood goods.");  
 }  
 else if(info.equals("Convenience stores"))  
 {  
 tv.setText("Near by stores");  
 }  
 }  
}

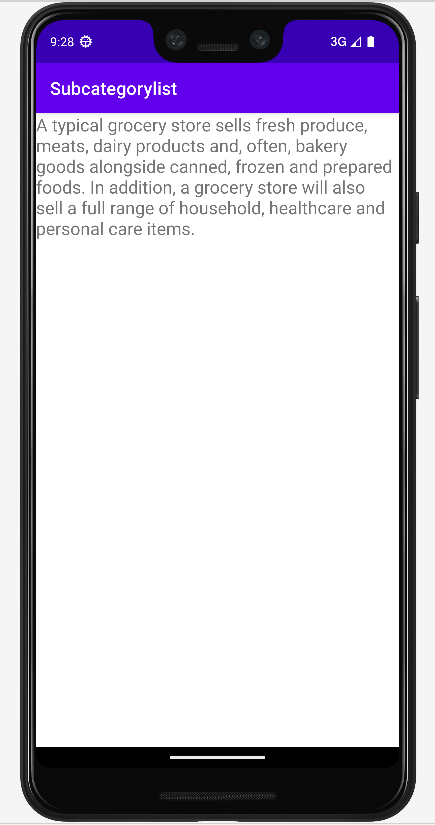
**output:-**

**  **

**  **

**  **

**  **

****