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Description automatically generated*Republic of the Philippines*

**EULOGIO “AMANG” RODRIGUEZ**

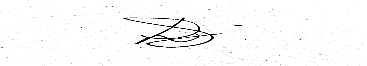
**INSTITUTE OF SCIENCE AND TECHNOLOGY**

*Nagtahan, Sampaloc, Manila*

COLLEGE OF ARTS AND SCIENCES - ITE DEPARTMENT

**< DATE >**

**Name <Signature/Date>**



**Mark Angel Dagar**

**Final Project in Application Development and Emerging Technologies Title:**

**Student Mark Grades**

**Rationale: (Background of the final project understudy)**

*Grading is the one of the major function, result, and outcome of assessing and evaluating students' learning in the educational setting. This short report provides three basic information about grading students: Its definition, purpose, and rationale. The definition of grades presents the concept of grading that is acceptable in literature as well as its process. The purpose of grading is discussed in terms of feedback administrative purposes, discovering exceptionalities and motivation. The rational of grades are further explained through absolute and fixed standards, norms, individual growth, and achievement relative ability and effort. Defining Grading ffective and efficient way of recording and reporting evaluation results is very important and useful to persons concerned in the school setting. Hence, it is very important that students' progress is recorded and reported to them, their parents and teachers, school administrators, counselors and employers as well because this information shall be used to guide and motivate students to learn, establish cooperation, and collaboration between the home and the school. It is also used in certifying the students' qualifications for higher educational levels and for employment. In the educational setting, grades are used to record and report students' progress. Grades are essential in education such that students' learning can be assessed, quantified, and communicated. Every teacher needs to assign grades which are based on assessment tools such as tests, quizzes, projects, and so on. Through these grades, achievement of learning goals can be communicated with students and parents, teachers, administrators, and counselors.*

**Area of Investigation: (Refer to enlisted lists of topics)**

The investigation covers the utilized of the current framework however automating it to effortlessly check the participation of the understudies and educators. To make it simpler to distinguish their records and punishments. The proposed framework will be equipped for keeping up the proficiency of each understudy participation record through Student ID. The proposed framework additionally has the ability of figuring punishment of understudy to begiven contingent upon his participation as respects to his/her nonappearances per occasion.

**Features of the application development: (min. of 5 in bulleted format)**

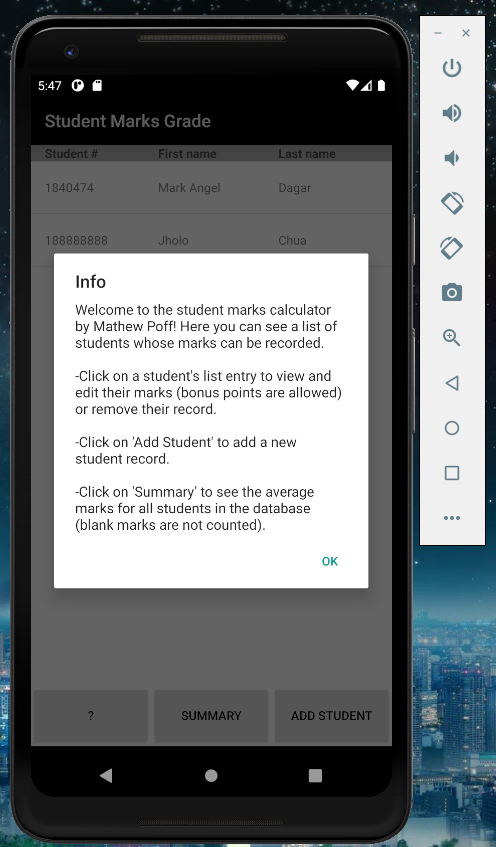
* **User’s Log In**
* **Information of the students**
* **Log out**

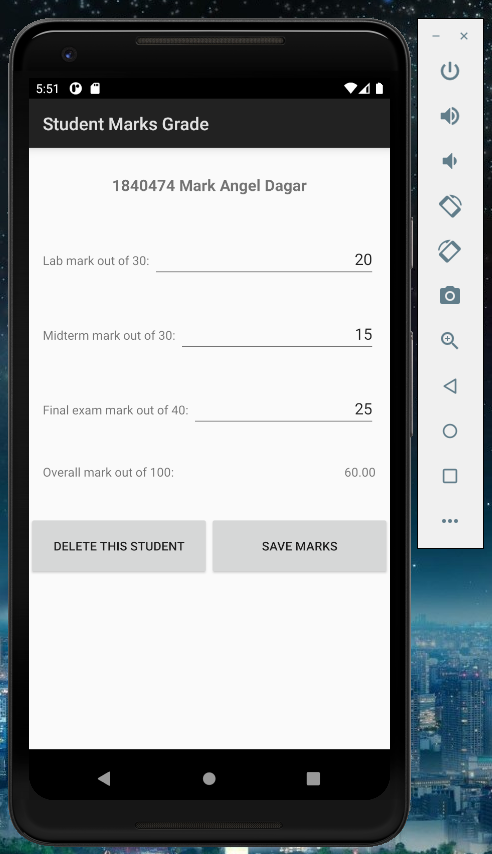
**Technologies: (min. of 3 in bulleted format)**

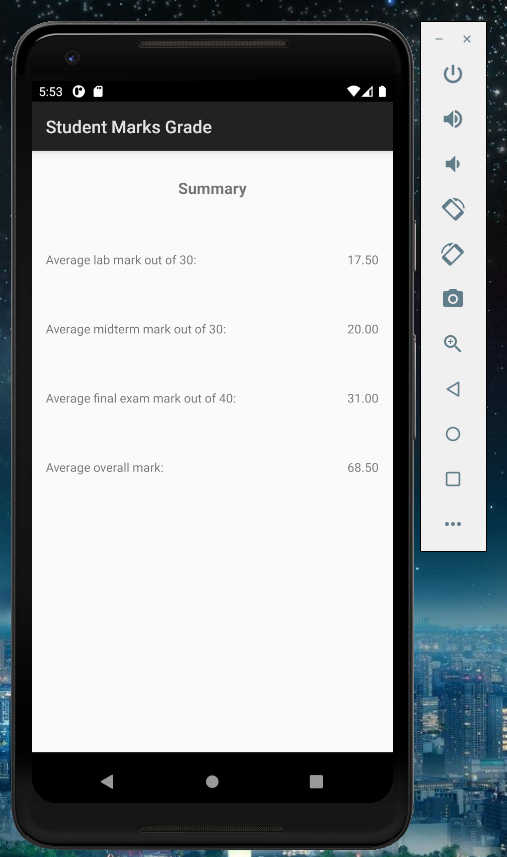
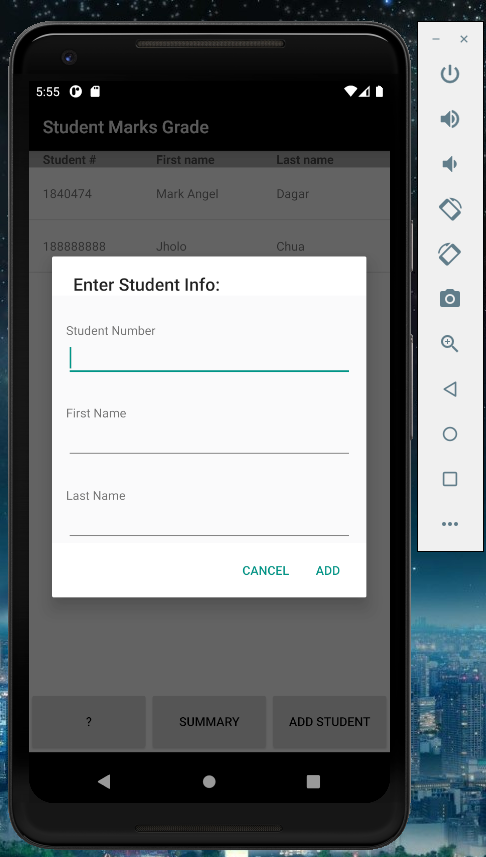
**<Frontend/ Backend>**

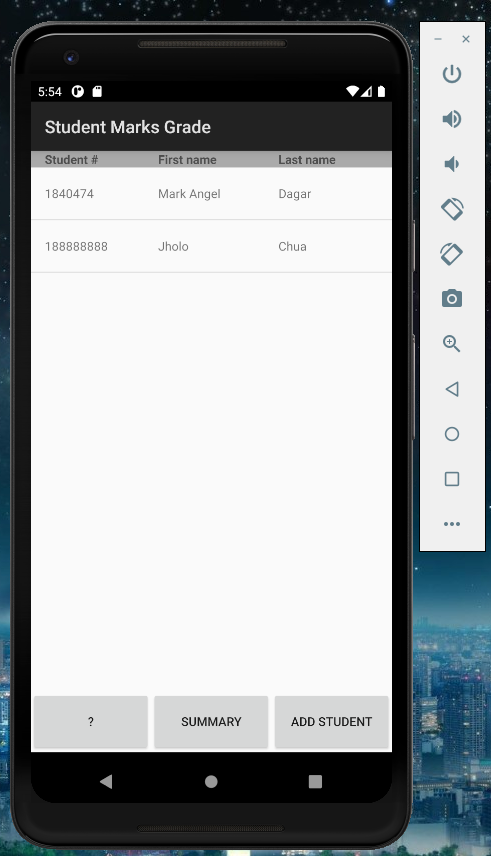
* **Android Studio 4.1.1**
* **Firebase**
* **AIDE**

**User’s Manual**









**XML**

**Activity Main**

*<?***xml version="1.0" encoding="utf-8"***?>*<**ScrollView xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**LinearLayout  
 android:orientation="vertical"  
 android:layout\_width="match\_parent" android:layout\_height="wrap\_content"**>  
  
 <**LinearLayout  
 android:orientation="vertical"  
 android:layout\_width="match\_parent" android:layout\_height="match\_parent"  
 android:paddingLeft="16dp" android:paddingRight="16dp"**>  
  
 <**TextView android:id="@+id/header"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="center"  
 android:paddingTop="30dp"  
 android:paddingBottom="30dp"  
 android:textSize="18.0sp" android:textStyle="bold"**/>  
  
 <**LinearLayout  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:paddingTop="20dp"  
 android:paddingBottom="20dp"**>  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Lab mark out of 30: "**/>  
  
 <**EditText  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="right"  
 android:inputType="numberDecimal"  
 android:ems="10"  
 android:id="@+id/labMark"  
 android:selectAllOnFocus="true"**/>  
 </**LinearLayout**>  
  
 <**LinearLayout  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:paddingTop="20dp"  
 android:paddingBottom="20dp"**>  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Midterm mark out of 30: "**/>  
  
 <**EditText  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="right"  
 android:inputType="numberDecimal"  
 android:ems="10"  
 android:id="@+id/midtermMark"  
 android:selectAllOnFocus="true"**/>  
 </**LinearLayout**>  
  
 <**LinearLayout  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:paddingTop="20dp"  
 android:paddingBottom="20dp"**>  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Final exam mark out of 40: "**/>  
  
 <**EditText  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="right"  
 android:inputType="numberDecimal"  
 android:ems="10"  
 android:id="@+id/finalExamMark"  
 android:selectAllOnFocus="true"**/>  
 </**LinearLayout**>  
  
 <**LinearLayout  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:paddingTop="20dp"  
 android:paddingBottom="20dp"**>  
  
 <**TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Overall mark out of 100:"**/>  
  
 <**TextView  
 android:layout\_width="fill\_parent"  
 android:layout\_height="wrap\_content"  
 android:gravity="right"  
 android:inputType="numberDecimal"  
 android:ems="10"  
 android:id="@+id/overallMark"** />  
 </**LinearLayout**>  
  
 </**LinearLayout**>  
  
 <**LinearLayout  
 android:orientation="horizontal"  
 android:layout\_width="match\_parent"  
 android:layout\_height="70dp"  
 android:layout\_marginTop="20dp" android:layout\_marginBottom="20dp"**>  
  
 <**Button  
 android:layout\_width="0dp"  
 android:layout\_height="fill\_parent"  
 android:layout\_weight="1"  
 android:text="Delete this student"  
 android:id="@+id/deleteStudentRecordButton"** />  
  
 <**Button  
 android:layout\_width="0dp"  
 android:layout\_height="fill\_parent"  
 android:layout\_weight="1"  
 android:text="Save Marks"  
 android:id="@+id/saveMarksButton"** />  
 </**LinearLayout**>  
 </**LinearLayout**>  
</**ScrollView**>

**Activity Baht**

**public void** onStart() {  
 **super**.onStart();  
  
 Cursor marks = ((StudentMarksCalculatorActivity) getActivity()).getDbHelper().fetchAverageMarks();  
  
 TextView labMarkField = (TextView) getActivity().findViewById(R.id.***averageLabMark***);  
 TextView midtermMarkField = (TextView) getActivity().findViewById(R.id.***averageMidtermMark***);  
 TextView finalExamMarkField = (TextView) getActivity().findViewById(R.id.***averageFinalExamMark***);  
 TextView overallMarkField = (TextView) getActivity().findViewById(R.id.***averageOverallMark***);  
  
 **double** labMark = marks.getDouble(marks.getColumnIndex(StudentRecordsDbAdapter.***AVG\_MARK\_LAB***));  
 **double** midtermMark = marks.getDouble(marks.getColumnIndex(StudentRecordsDbAdapter.***AVG\_MARK\_MIDTERM***));  
 **double** finalExamMark = marks.getDouble(marks.getColumnIndex(StudentRecordsDbAdapter.***AVG\_MARK\_FINAL\_EXAM***));  
 **double** overallMark = labMark + midtermMark + finalExamMark;  
  
 DecimalFormat numberFormat = **new** DecimalFormat(**"#.00"**);  
  
 labMarkField.setText(numberFormat.format(labMark));  
 midtermMarkField.setText(numberFormat.format(midtermMark));  
 finalExamMarkField.setText(numberFormat.format(finalExamMark));  
 overallMarkField.setText(numberFormat.format(overallMark));  
  
 }  
  
}

**Activity Bahtfacts**

**public** View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle savedInstanceState) {  
 View v = inflater.inflate(R.layout.***smc\_student\_records***, container, **false**);  
  
 Button addStudentRecordButton = (Button) v.findViewById(R.id.***addStudentRecordButton***);  
 addStudentRecordButton.setOnClickListener(**this**);  
  
 Button studentsSummaryButton = (Button) v.findViewById(R.id.***summaryButton***);  
 studentsSummaryButton.setOnClickListener(**this**);  
  
 Button infoButton = (Button) v.findViewById(R.id.***infoButton***);  
 infoButton.setOnClickListener(**this**);  
  
 **return** v;  
 }  
  
 */\*\*  
 \* Called when this Fragment becomes visible to the user; Gets database adpater reference and displays the list view.  
 \*/* @Override  
 **public void** onStart() {  
 **super**.onStart();  
  
 **dbHelper** = ((StudentMarksCalculatorActivity) getActivity()).getDbHelper();  
 displayListView();  
  
 *// When in two-pane layout, set the listview to highlight the selected list item  
 // (We do this during onStart because at the point the listview is available.)* **if** (getFragmentManager().findFragmentById(R.id.***details\_fragment***) != **null**) {  
 getListView().setChoiceMode(ListView.***CHOICE\_MODE\_SINGLE***);  
 }  
 }  
  
 */\*\*  
 \* Called when this Fragment attaches to an Activity; Sets a reference to the parent Activity.  
 \** ***@param activity*** *\*/* @Override  
 **public void** onAttach(Activity activity) {  
 **super**.onAttach(activity);  
 **parentActivity** = ((StudentMarksCalculatorActivity)activity);  
 }  
  
 */\*\*  
 \* Called when the user clicks on a list item; Notifies the parent Activity.  
 \** ***@param l*** *\** ***@param v*** *\** ***@param position*** *\** ***@param id*** *\*/* @Override  
 **public void** onListItemClick(ListView l, View v, **int** position, **long** id) {  
  
 ViewGroup listItem = ((ViewGroup)v);  
 String firstName = ((TextView)listItem.findViewById(R.id.***firstName***)).getText().toString();  
 String lastName = ((TextView)listItem.findViewById(R.id.***lastName***)).getText().toString();  
  
 **parentActivity**.onStudentSelected(id, firstName, lastName);  
  
 getListView().setItemChecked(position, **true**);  
 }  
  
 */\*\*  
 \* Called when the user clicks on a view; Handles Button clicks.  
 \** ***@param v*** *\*/* @Override  
 **public void** onClick(View v) {  
 **switch**(v.getId()) {  
 **case** R.id.***addStudentRecordButton***:  
 openAddStudentDialog();  
 **break**;  
 **case** R.id.***summaryButton***:  
 ((StudentMarksCalculatorActivity) getActivity()).openSummary();  
 **break**;  
 **case** R.id.***infoButton***:  
 openInfoDialog();  
 }  
 }  
  
 */\*\*  
 \* Opens a dialog that lets the user add a student to the database.  
 \*/* **private void** openAddStudentDialog() {  
 LayoutInflater factory = LayoutInflater.*from*(getActivity());  
  
 **final** View studentEntryView = factory.inflate(R.layout.***smc\_student\_entry***, **null**);  
  
 **final** EditText studentNumberField = (EditText) studentEntryView.findViewById(R.id.***studentNumber***);  
 **final** EditText studentFirstNameField = (EditText) studentEntryView.findViewById(R.id.***firstName***);  
 **final** EditText studentLastNameField = (EditText) studentEntryView.findViewById(R.id.***lastName***);  
  
 **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Enter Student Info:"**)  
 .setView(studentEntryView).setPositiveButton(**"Add"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** whichButton) **throws** NumberFormatException, SQLiteConstraintException {  
 String studentNumber = studentNumberField.getText().toString();  
 String studentFirstName = studentFirstNameField.getText().toString();  
 String studentLastName = studentLastNameField.getText().toString();  
  
 **if** (studentNumber.length() > 0  
 && studentFirstName.length() > 0  
 && studentLastName.length() > 0  
 ) { *//if no fields are empty* **try** {  
 **dbHelper**.insertStudent(  
 Integer.*parseInt*(studentNumberField.getText().toString()),  
 studentFirstNameField.getText().toString(),  
 studentLastNameField.getText().toString()  
 );  
  
 **dbHelper**.insertMarks(  
 Integer.*valueOf*(studentNumberField.getText().toString()),  
 **null**,  
 **null**,  
 **null** );  
 } **catch** (NumberFormatException e) {  
 **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Invalid input; student not added"**)  
 .setMessage(e.getMessage())  
 .setPositiveButton(**"OK"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** id) {  
 dialog.cancel();  
 }  
 })  
 .show();  
 } **catch** (SQLiteConstraintException e) {  
 **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Invalid input; student not added"**)  
 .setMessage(**"That student number is already in use!"**)  
 .setPositiveButton(**"OK"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** id) {  
 dialog.cancel();  
 }  
 })  
 .show();  
 }  
 displayListView();  
 } **else** { *//if there are empty entries* **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Invalid input; student not added"**)  
 .setMessage(**"Student number, first name and last name cannot be empty!"**)  
 .setPositiveButton(**"OK"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** id) {  
 dialog.cancel();  
 }  
 })  
 .show();  
 }  
 }  
 })  
 .setNegativeButton(**"Cancel"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** whichButton) {  
 *//cancel button clicked* }  
 }).show();  
  
 }  
  
 */\*\*  
 \* Opens a dialog that displays information about this sub-application to the user.  
 \*/* **private void** openInfoDialog() {  
 **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Info"**)  
 .setMessage(**"Welcome to the student marks calculator by Mathew Poff! Here you "** +  
 **"can see a list of students whose marks can be recorded."** +  
 **"\n\n-Click on a student's list entry to view and edit their marks "** +  
 **"(bonus points are allowed) or remove their record."** +  
 **"\n\n-Click on 'Add Student' to add a new student record."** +  
 **"\n\n-Click on 'Summary' to see the average marks for all students in "** +  
 **"the database (blank marks are not counted)."**)  
 .setPositiveButton(**"OK"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** id) {  
 dialog.cancel();  
 }  
 })  
 .show();  
 }  
  
 */\* Code modified from function HeadlinesFragment.displayListView() obtained from  
 \* https://blackboard.algonquincollege.com/bbcswebdav/pid-961589-dt-content-rid-1901290\_1/xid-1901290\_1?target=blank  
 \*/  
 /\*\*  
 \* Sets up the student list with students from the database.  
 \*/* **private void** displayListView() {  
 Cursor cursor = **dbHelper**.fetchAllStudents();  
  
 *// columns to be bound* String[] columns = **new** String[] {  
 StudentRecordsDbAdapter.***STUDENT\_ID***,  
 StudentRecordsDbAdapter.***STUDENT\_FIRSTNAME***,  
 StudentRecordsDbAdapter.***STUDENT\_LASTNAME*** };  
  
 *//bind data to these views* **int**[] to = **new int**[] {  
 R.id.***studentNumber***,  
 R.id.***firstName***,  
 R.id.***lastName*** };  
  
 SimpleCursorAdapter dataAdapter = **new** SimpleCursorAdapter(  
 getActivity(), **listItemLayout**,  
 cursor,  
 columns,  
 to,  
 0);  
  
 setListAdapter(dataAdapter);  
  
 dataAdapter.setFilterQueryProvider(**new** FilterQueryProvider() {  
 **public** Cursor runQuery(CharSequence constraint) {  
 **return dbHelper**.fetchStudentById(Long.*valueOf*(constraint.toString()));  
 }  
 });  
 }  
}

**Activity Dollar**

**private static final** String ***CREATE\_MARKS\_TABLE*** =  
 **"CREATE TABLE if not exists "** + ***SQLITE\_MARKS\_TABLE*** + **" ("** + ***STUDENT\_ID*** + **" integer PRIMARY KEY NOT NULL,"** + ***MARK\_LAB*** + **" real,"** + ***MARK\_MIDTERM*** + **" real,"** + ***MARK\_FINAL\_EXAM*** + **" real,"** + **"CONSTRAINT fk\_student FOREIGN KEY ("** + ***MARK\_STUDENT\_ID*** + **")"** + **" REFERENCES "** + ***SQLITE\_STUDENT\_TABLE*** + **"("** + ***STUDENT\_ID*** + **")"** + **");"** ;  
  
 */\*\*  
 \* SQLite query that inserts sample students.  
 \*/* **public static final** String ***INSERT\_SAMPLE\_STUDENTS*** =  
 **"INSERT INTO "**+***SQLITE\_STUDENT\_TABLE***+**" ("**+***STUDENT\_ID***+**","**+***STUDENT\_FIRSTNAME***+**","**+***STUDENT\_LASTNAME***+**") VALUES "** + **"(123123001,'Carl','Wallace'),"** + **"(123123002,'Tracey','Vance'),"** + **"(123123003,'Karen','Walsh'),"** + **"(123123004,'Lucas','Ince'),"** + **"(123123005,'Gavin','Dowd'),"** + **"(123123006,'Carl','Paige'),"** + **"(123123007,'Matt','Wilkins'),"** + **"(123123008,'Gabrielle','Jackson'),"** + **"(123123009,'William','Cameron'),"** + **"(123123010,'Stephanie','Underwood'),"** + **"(123123011,'Blake','May'),"** + **"(123123012,'Jasmine','Mitchell'),"** + **"(123123013,'Heather','Black'),"** + **"(123123014,'Emma','Graham'),"** + **"(123123016,'Cameron','Underwood'),"** + **"(123123017,'Megan','Wallace'),"** + **"(123123018,'Andrew','Peake'),"** + **"(123123019,'Amy','Young'),"** + **"(123123020,'Simon','Hill');"**;  
  
 */\*\*  
 \* SQLite query that inserts sample marks.  
 \*/* **public static final** String ***INSERT\_SAMPLE\_MARKS*** =  
 **"INSERT INTO "**+***SQLITE\_MARKS\_TABLE***+**" ("**+***STUDENT\_ID***+**","**+***MARK\_LAB***+**","**+***MARK\_MIDTERM***+**","**+***MARK\_FINAL\_EXAM***+**") VALUES "** + **"(123123001,12,30,20),"** + **"(123123002,28,23,40),"** + **"(123123003,15,16,34),"** + **"(123123004,10,28,20),"** + **"(123123005,0,23,40),"** + **"(123123006,30,30,40),"** + **"(123123007,23,null,null),"** + **"(123123008,25,null,null),"** + **"(123123009,14,null,null),"** + **"(123123010,null,30,40),"** + **"(123123011,23,29,37),"** + **"(123123012,12,20,23),"** + **"(123123013,14,15,5),"** + **"(123123014,27,29,26),"** + **"(123123016,29,30,39),"** + **"(123123017,25,29,38),"** + **"(123123018,22,27,37),"** + **"(123123019,20,14,36),"** + **"(123123020,28,23,34);"**;  
  
 */\*\*  
 \* Database helper for creating and upgrading the database.  
 \*/* **private static class** DatabaseHelper **extends** SQLiteOpenHelper {  
  
 */\*\*  
 \* Constructor.  
 \** ***@param context*** *\*/* DatabaseHelper(Context context) {  
 **super**(context, ***DATABASE\_NAME***, **null**, ***DATABASE\_VERSION***);  
 }  
  
 */\*\*  
 \* Creates the database tables.  
 \** ***@param db*** *\*/* @Override  
 **public void** onCreate(SQLiteDatabase db) {  
 db.execSQL(***CREATE\_STUDENT\_TABLE***);  
 db.execSQL(***CREATE\_MARKS\_TABLE***);  
 db.execSQL(***INSERT\_SAMPLE\_STUDENTS***);  
 db.execSQL(***INSERT\_SAMPLE\_MARKS***);  
 }  
  
 */\*\*  
 \* Upgrades the database.  
 \** ***@param db*** *\** ***@param oldVersion*** *\** ***@param newVersion*** *\*/* @Override  
 **public void** onUpgrade(SQLiteDatabase db, **int** oldVersion, **int** newVersion) {  
 Log.*w*(***TAG***, **"Upgrading database from version "** + oldVersion + **" to "** + newVersion + **", which will destroy all old data"**);  
 db.execSQL(**"DROP TABLE IF EXISTS "** + ***SQLITE\_STUDENT\_TABLE***);  
 db.execSQL(**"DROP TABLE IF EXISTS "** + ***SQLITE\_MARKS\_TABLE***);  
 onCreate(db);  
 }  
 }  
  
 */\*\*  
 \* Constructor  
 \** ***@param ctx*** *\*/* **public** StudentRecordsDbAdapter(Context ctx) {  
 **this**.**mCtx** = ctx;  
 }  
  
 */\*\*  
 \* Initializes the database helper and the database.  
 \** ***@return*** *\** ***@throws*** *SQLException  
 \*/* **public** StudentRecordsDbAdapter open() **throws** SQLException {  
 **mDbHelper** = **new** DatabaseHelper(**mCtx**);  
 **mDb** = **mDbHelper**.getWritableDatabase();  
 **return this**;  
 }  
  
 */\*\*  
 \* Closes the database helper.  
 \*/* **public void** close() {  
 **if** (**mDbHelper** != **null**) {  
 **mDbHelper**.close();  
 }  
 }  
  
 */\*\*  
 \* Inserts a student into the student table.  
 \** ***@param studentNumber*** *\** ***@param firstname*** *\** ***@param lastname*** *\** ***@return*** *\*/* **public long** insertStudent(**int** studentNumber, String firstname, String lastname) {  
 ContentValues initialValues = **new** ContentValues();  
 initialValues.put(***STUDENT\_ID***, studentNumber);  
 initialValues.put(***STUDENT\_FIRSTNAME***, firstname);  
 initialValues.put(***STUDENT\_LASTNAME***, lastname);  
  
 **return mDb**.insertOrThrow(***SQLITE\_STUDENT\_TABLE***, **null**, initialValues);  
 }  
  
 */\*\*  
 \* Inserts a student's marks into the marks table.  
 \** ***@param studentId*** *\** ***@param labMark*** *\** ***@param midtermMark*** *\** ***@param finalExamMark*** *\** ***@return*** *\*/* **public long** insertMarks(**int** studentId, Double labMark, Double midtermMark, Double finalExamMark) {  
 ContentValues initialValues = **new** ContentValues();  
 initialValues.put(***STUDENT\_ID***, studentId);  
 initialValues.put(***MARK\_LAB***, labMark);  
 initialValues.put(***MARK\_MIDTERM***, midtermMark);  
 initialValues.put(***MARK\_FINAL\_EXAM***, finalExamMark);  
  
 **return mDb**.insertOrThrow(***SQLITE\_MARKS\_TABLE***, **null**, initialValues);  
 }  
  
 */\*\*  
 \* Fetches all students from the database.  
 \** ***@return*** *\*/* **public** Cursor fetchAllStudents() {  
 Cursor mCursor = **mDb**.query(***SQLITE\_STUDENT\_TABLE***, **new** String[] {***STUDENT\_ID***, ***STUDENT\_FIRSTNAME***, ***STUDENT\_LASTNAME***},  
 **null**, **null**, **null**, **null**, **null**);  
  
 **if** (mCursor != **null**) {  
 mCursor.moveToFirst();  
 }  
 **return** mCursor;  
 }  
  
 */\*\*  
 \* Fetches a student from the database given their Id.  
 \** ***@param id*** *\** ***@return*** *\*/* **public** Cursor fetchStudentById(Long id) {  
 Log.*w*(***TAG***, id.toString());  
 Cursor mCursor = **null**;  
 **if** (id == **null** || id.toString().length () == 0) {  
 mCursor = **mDb**.query(***SQLITE\_STUDENT\_TABLE***, **new** String[] {***STUDENT\_ID***,  
 ***STUDENT\_FIRSTNAME***, ***STUDENT\_LASTNAME***},  
 **null**, **null**, **null**, **null**, **null**);  
  
 }  
 **else** {  
 mCursor = **mDb**.query(**true**, ***SQLITE\_STUDENT\_TABLE***, **new** String[] {***STUDENT\_ID***,  
 ***STUDENT\_FIRSTNAME***, ***STUDENT\_LASTNAME***},  
 ***STUDENT\_ID*** + **" = "** + id, **null**,  
 **null**, **null**, **null**, **null**);  
 }  
 **if** (mCursor != **null**) {  
 mCursor.moveToFirst();  
 }  
 **return** mCursor;  
 }  
  
 */\*\*  
 \* Fetches a student's marks given the student's Id.  
 \** ***@param studentId*** *\** ***@return*** *\*/* **public** Cursor fetchMarksByStudentId(**long** studentId) {  
 Cursor mCursor = **mDb**.query(***SQLITE\_MARKS\_TABLE***,  
 **new** String[] {***MARK\_LAB***, ***MARK\_MIDTERM***, ***MARK\_FINAL\_EXAM***},  
 ***STUDENT\_ID*** + **" = ?"**,  
 **new** String[] {Long.*toString*(studentId)},  
 **null**, **null**, **null**);  
 **if** (mCursor != **null**) {  
 mCursor.moveToFirst();  
 }  
 **return** mCursor;  
 }  
  
 */\*\*  
 \* Fetches the average marks from the database.  
 \** ***@return*** *\*/* **public** Cursor fetchAverageMarks() {  
 Cursor mCursor = **mDb**.query(***SQLITE\_MARKS\_TABLE***,  
 **new** String[] {***AVG\_MARK\_LAB***, ***AVG\_MARK\_MIDTERM***, ***AVG\_MARK\_FINAL\_EXAM***},  
 **null**, **null**, **null**, **null**, **null**);  
 **if** (mCursor != **null**) {  
 mCursor.moveToFirst();  
 }  
 **return** mCursor;  
 }  
  
 */\*\*  
 \* Updates a student's marks.  
 \** ***@param studentId*** *\** ***@param labMark*** *\** ***@param midtermMark*** *\** ***@param finalExamMark*** *\** ***@return*** *\*/* **public int** updateMarks(**long** studentId, Double labMark, Double midtermMark, Double finalExamMark) {  
 ContentValues newValues = **new** ContentValues();  
 newValues.put(***MARK\_LAB***, labMark);  
 newValues.put(***MARK\_MIDTERM***, midtermMark);  
 newValues.put(***MARK\_FINAL\_EXAM***, finalExamMark);  
 **return mDb**.update(  
 ***SQLITE\_MARKS\_TABLE***,  
 newValues,  
 ***STUDENT\_ID*** + **" = ?"**,  
 **new** String[] {Long.*toString*(studentId)}  
 );  
 }  
  
 */\*\*  
 \* Deletes a student and their marks from the database.  
 \** ***@param id*** *\** ***@return*** *\*/* **public boolean** deleteStudentAndMarksById(**long** id) {  
 **int** doneDelete = 0;  
 doneDelete += **mDb**.delete(  
 ***SQLITE\_STUDENT\_TABLE***,  
 ***STUDENT\_ID*** + **" = ?"**,  
 **new** String[] {Long.*toString*(id)}  
 );  
 doneDelete += **mDb**.delete(  
 ***SQLITE\_MARKS\_TABLE***,  
 ***STUDENT\_ID*** + **" = ?"**,  
 **new** String[] {Long.*toString*(id)}  
 );  
 **return** doneDelete == 2;  
 }  
  
 */\*\*  
 \* Deletes all students from the database.  
 \** ***@return*** *\*/* **public boolean** deleteAllStudents() {  
 **int** doneDelete = 0;  
 doneDelete = **mDb**.delete(***SQLITE\_STUDENT\_TABLE***, **null** , **null**);  
 Log.*w*(***TAG***, Integer.*toString*(doneDelete));  
 **return** doneDelete > 0;  
 }  
  
 */\*\*  
 \* Deletes all marks from the database.  
 \** ***@return*** *\*/* **public boolean** deleteAllMarks() {  
 **int** doneDelete = 0;  
 doneDelete = **mDb**.delete(***SQLITE\_MARKS\_TABLE***, **null** , **null**);  
 Log.*w*(***TAG***, Integer.*toString*(doneDelete));  
 **return** doneDelete > 0;  
 }  
}

**Activity Dollarfacts**

**public void** onStudentSelected(**long** id, String firstName, String lastName) {  
 *// The user selected the headline of an article from the HeadlinesFragment  
  
 // Capture the article fragment from the activity layout* StudentDetailsFragment detailsFrag = (StudentDetailsFragment)  
 getSupportFragmentManager().findFragmentById(R.id.***details\_fragment***);  
  
 **if** (detailsFrag != **null**) {  
 *// If article frag is available, we're in two-pane layout...  
  
 // Call a method in the ArticleFragment to update its content* detailsFrag.updateDetailsView(id, firstName, lastName);  
  
 } **else** {  
 *// If the frag is not available, we're in the one-pane layout and must swap frags...  
  
 // Create fragment and give it an argument for the selected article* StudentDetailsFragment newFragment = **new** StudentDetailsFragment();  
 Bundle args = **new** Bundle();  
 args.putLong(StudentDetailsFragment.***ARG\_STUDENT\_ID***, id);  
 args.putString(StudentDetailsFragment.***ARG\_STUDENT\_FIRSTNAME***, firstName);  
 args.putString(StudentDetailsFragment.***ARG\_STUDENT\_LASTNAME***, lastName);  
 newFragment.setArguments(args);  
 FragmentTransaction transaction = getSupportFragmentManager().beginTransaction();  
  
 *// Replace whatever is in the fragment\_container view with this fragment,  
 // and add the transaction to the back stack so the user can navigate back* transaction.replace(R.id.***fragment\_container***, newFragment);  
 transaction.addToBackStack(**null**);  
  
 *// Commit the transaction* transaction.commit();  
 }  
 }  
  
 */\*\*  
 \* Opens the StudentsSummaryFragment  
 \*/* **public void** openSummary() {  
 *// The user selected the headline of an article from the HeadlinesFragment  
  
 // Capture the article fragment from the activity layout* StudentDetailsFragment detailsFrag = (StudentDetailsFragment)  
 getSupportFragmentManager().findFragmentById(R.id.***details\_fragment***);  
  
 **if** (detailsFrag != **null**) {  
 *// If article frag is available, we're in two-pane layout...  
  
 // Call a method in the ArticleFragment to update its content  
 //insert summary frag* } **else** {  
 *// If the frag is not available, we're in the one-pane layout and must swap frags...  
  
 // Create fragment and give it an argument for the selected article* StudentsSummaryFragment newFragment = **new** StudentsSummaryFragment();  
 FragmentTransaction transaction = getSupportFragmentManager().beginTransaction();  
  
 *// Replace whatever is in the fragment\_container view with this fragment,  
 // and add the transaction to the back stack so the user can navigate back* transaction.replace(R.id.***fragment\_container***, newFragment);  
 transaction.addToBackStack(**null**);  
  
 *// Commit the transaction* transaction.commit();  
 }  
 }  
  
 */\*\*  
 \* Returns the database adapter.  
 \** ***@return*** *\*/* **public** StudentRecordsDbAdapter getDbHelper() {**return dbHelper**;}  
}

**Activity Euro**

**public** View onCreateView(LayoutInflater inflater, ViewGroup container,  
 Bundle savedInstanceState) {  
 View v = inflater.inflate(R.layout.***smc\_student\_details***, container, **false**);  
  
 **if** (savedInstanceState != **null**) {  
 **studentId** = savedInstanceState.getInt(***ARG\_STUDENT\_ID***);  
 **studentFirstName** = savedInstanceState.getString(***ARG\_STUDENT\_FIRSTNAME***);  
 **studentLastName** = savedInstanceState.getString(***ARG\_STUDENT\_LASTNAME***);  
 *//updateDetailsView(studentId, studentFirstName, studentLastName);* }  
  
 Button deleteStudentRecordButton = (Button) v.findViewById(R.id.***deleteStudentRecordButton***);  
 deleteStudentRecordButton.setOnClickListener(**this**);  
  
 Button saveMarksButton = (Button) v.findViewById(R.id.***saveMarksButton***);  
 saveMarksButton.setOnClickListener(**this**);  
  
 **labMarkField** = (EditText) v.findViewById(R.id.***labMark***);  
 **midtermMarkField** = (EditText) v.findViewById(R.id.***midtermMark***);  
 **finalExamMarkField** = (EditText) v.findViewById(R.id.***finalExamMark***);  
 **overallMarkField** = (TextView) v.findViewById(R.id.***overallMark***);  
  
 MarkTextWatcher markTextWatcher = **new** MarkTextWatcher();  
 **labMarkField**.addTextChangedListener(markTextWatcher);  
 **midtermMarkField**.addTextChangedListener(markTextWatcher);  
 **finalExamMarkField**.addTextChangedListener(markTextWatcher);  
  
 **return** v;  
 }  
  
 */\*\*  
 \* Called when this Fragment becomes visible to the user; Updates details view if necessary.  
 \*/* @Override  
 **public void** onStart() {  
 **super**.onStart();  
  
 Bundle args = getArguments();  
 **if** (args != **null**) {  
 updateDetailsView(args.getLong(***ARG\_STUDENT\_ID***), args.getString(***ARG\_STUDENT\_FIRSTNAME***), args.getString(***ARG\_STUDENT\_LASTNAME***));  
 } **else if** (**studentId** != -1) {  
 updateDetailsView(**studentId**, **studentFirstName**, **studentLastName**);  
 }  
 }  
  
 */\*\*  
 \* Called when this Fragment is destroyed; stores a static bit field (int) of changing  
 \* configuration parameters to detect screen rotation.  
 \*/* **public void** onDestroy() {  
 **super**.onDestroy();  
 *oldConfigInt* = getActivity().getChangingConfigurations();  
 }  
  
 */\*\*  
 \* Called when the user clicks on a view; Handles Button presses.  
 \** ***@param v*** *\*/* @Override  
 **public void** onClick(View v) {  
 **switch**(v.getId()) {  
 **case** R.id.***deleteStudentRecordButton***:  
 ((StudentMarksCalculatorActivity) getActivity()).getDbHelper().deleteStudentAndMarksById(**studentId**);  
 getFragmentManager().popBackStackImmediate();  
 **break**;  
 **case** R.id.***saveMarksButton***:  
 **new** saveMarksTask().execute();  
 **break**;  
 }  
 }  
  
 */\*\*  
 \* Updates the details view with the student data from the database, unless this Fragment was  
 \* recreated after the screen rotated, in which case it retains the data from the previous  
 \* instance.  
 \** ***@param id*** *\** ***@param firstName*** *\** ***@param lastName*** *\*/* **public void** updateDetailsView(**long** id, String firstName, String lastName) {  
  
 *//easier way of getting student name, but needs to query for the same data a second time  
 /\*detailsHeader = (TextView) getActivity().findViewById(R.taat\_id.detailsHeader);  
 Cursor studentInfo = ((StudentMarksCalculatorActivity) getActivity()).getDbHelper().fetchStudentById(taat\_id);  
 String studentFirstName = studentInfo.getString(studentInfo.getColumnIndex(StudentRecordsDbAdapter.STUDENT\_FIRSTNAME));  
 String lastName = studentInfo.getString(studentInfo.getColumnIndex(StudentRecordsDbAdapter.STUDENT\_LASTNAME));  
 detailsHeader.setText(Long.toString(taat\_id)+" "+studentFirstName+" "+lastName);\*/* **detailsHeader** = (TextView) getActivity().findViewById(R.id.***header***);  
 **detailsHeader**.setText(Long.*toString*(id)+**" "**+firstName+**" "**+lastName);  
  
 **if** ((*oldConfigInt* & ActivityInfo.***CONFIG\_ORIENTATION***) != ActivityInfo.***CONFIG\_ORIENTATION***) {  
 Cursor marks = ((StudentMarksCalculatorActivity) getActivity()).getDbHelper().fetchMarksByStudentId(id);  
  
 String labMark = marks.getString(marks.getColumnIndex(StudentRecordsDbAdapter.***MARK\_LAB***));  
 String midtermMark = marks.getString(marks.getColumnIndex(StudentRecordsDbAdapter.***MARK\_MIDTERM***));  
 String finalExamMark = marks.getString(marks.getColumnIndex(StudentRecordsDbAdapter.***MARK\_FINAL\_EXAM***));  
  
 **labMarkField**.setText(labMark);  
 **midtermMarkField**.setText(midtermMark);  
 **finalExamMarkField**.setText(finalExamMark);  
 updateOverallMark();  
 }  
  
 **studentId** = id;  
 }  
  
 */\*\*  
 \* Saves the student Id when this Fragment is destroyed.  
 \** ***@param outState*** *\*/* @Override  
 **public void** onSaveInstanceState(Bundle outState) {  
 **super**.onSaveInstanceState(outState);  
  
 *// Save the current article selection in case we need to recreate the fragment* outState.putLong(***ARG\_STUDENT\_ID***, **studentId**);  
 }  
  
 */\*\*  
 \* Updates the overall mark field.  
 \*/* **private void** updateOverallMark() {  
 **double** overallMark = 0;  
 **for** (EditText field : **new** EditText[] {**labMarkField**, **midtermMarkField**, **finalExamMarkField**}) {  
 String content = field.getText().toString();  
 **try** {  
 overallMark += Double.*parseDouble*(content);  
 }  
 **catch** (NumberFormatException e) {}  
 }  
  
 DecimalFormat numberFormat = **new** DecimalFormat(**"#.00"**);  
 **overallMarkField**.setText(numberFormat.format(overallMark));  
 }  
  
 */\*\*  
 \* Saves the marks in the mark EditTexts to the database.  
 \** ***@return*** *\*/* **private int** saveMarks() **throws** NumberFormatException {  
 Double[] marks = **new** Double[3];  
 TextView[] fields = **new** TextView[] {**labMarkField**, **midtermMarkField**, **finalExamMarkField**};  
 **for** (**int** i = 0; i < fields.**length**; i++) {  
 String fieldText = fields[i].getText().toString();  
 **if** (fieldText==**null** || fieldText.length()==0) {  
 marks[i] = **null**;  
 }  
 **else** {  
 **try** {  
 marks[i] = Double.*valueOf*(fields[i].getText().toString());  
 } **catch** (NumberFormatException e) {  
 **return** -1;  
 }  
 }  
 }  
 **return** ((StudentMarksCalculatorActivity) getActivity()).getDbHelper().updateMarks(**studentId**, marks[0], marks[1], marks[2]);  
 }  
  
 */\*\*  
 \* Listener class for when the user edits a mark field.  
 \*/* **private class** MarkTextWatcher **implements** TextWatcher {  
  
 */\*\*  
 \* Called before the text is changed; does nothing but is required.  
 \** ***@param s*** *\** ***@param start*** *\** ***@param count*** *\** ***@param after*** *\*/* @Override  
 **public void** beforeTextChanged(CharSequence s, **int** start, **int** count, **int** after) {}  
  
 */\*\*  
 \* Called after the text is changed; does nothing but is required.  
 \** ***@param s*** *\** ***@param start*** *\** ***@param before*** *\** ***@param count*** *\*/* @Override  
 **public void** onTextChanged(CharSequence s, **int** start, **int** before, **int** count) {}  
  
 */\*\*  
 \* Called after the text is changed; Updates the overall mark field.  
 \** ***@param s*** *\*/* @Override  
 **public void** afterTextChanged(Editable s) {  
 updateOverallMark();  
 }  
 }  
  
 */\*\*  
 \* Runs an update query to save the marks to the database in the background.  
 \*/* **private class** saveMarksTask **extends** AsyncTask<Void, Void, Integer> {  
  
 */\*\*  
 \* Runs an update query to save the marks to the database in the background.  
 \** ***@param params*** *\** ***@return*** *\*/* @Override  
 **protected** Integer doInBackground(Void... params) {  
 **return** saveMarks();  
 }  
  
 */\*\*  
 \* Displays a message if the update was successful or not.  
 \** ***@param result*** *\*/* @Override  
 **protected void** onPostExecute(Integer result) {  
 **if** (result == 1) **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Marks saved."**)  
 .setPositiveButton(**"OK"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** id) {  
 dialog.cancel();  
 }  
 })  
 .show();  
 **else if** (result == -1) {  
 **new** AlertDialog.Builder(getActivity())  
 .setTitle(**"Marks not saved."**)  
 .setMessage(**"A mark can be either a decimal number or empty"**)  
 .setPositiveButton(**"OK"**, **new** DialogInterface.OnClickListener() {  
 **public void** onClick(DialogInterface dialog, **int** id) {  
 dialog.cancel();  
 }  
 })  
 .show();  
 }  
 }  
 }  
}

**Activity Eurofacts**

**public class** NavigationActionBarActivity **extends** ActionBarActivity {  
  
 */\*\*  
 \* Called when the options menu is created; Adds items to the action bar if it is present.  
 \** ***@param menu*** *\** ***@return*** *\*/* @Override  
 **public boolean** onCreateOptionsMenu(Menu menu) {  
 *// Inflate the menu; this adds items to the action bar if it is present.* getMenuInflater().inflate(R.menu.***menu\_main***, menu);  
 **return true**;  
 }  
  
 */\*\*  
 \* Called when an action bar item is clicked; switches between sub-applications.  
 \** ***@param item*** *\** ***@return*** *\*/* @Override  
 **public boolean** onOptionsItemSelected(MenuItem item) {  
 *// Handle action bar item clicks here. The action bar will  
 // automatically handle clicks on the Home/Up button, so long  
 // as you specify a parent activity in AndroidManifest.xml.* **int** id = item.getItemId();  
  
 *//noinspection SimplifiableIfStatement  
 /\*if (id == R.id.action\_settings) {  
 return true;  
 }\*/* **switch** (id){  
 *//navbar menu items have been removed.* }  
  
 **return super**.onOptionsItemSelected(item);  
 }  
  
 */\*\*  
 \* Switches to another sub-application.  
 \** ***@param c*** *\*/* **private void** go(Class c){  
 Intent intent = **new** Intent(**this**, c);  
 startActivity(intent);  
 }  
}

**Activity Login**

*<?*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"  
 android:background="@drawable/currencybg"  
 tools:context=".LogIn">  
  
 <ImageView  
 android:id="@+id/imageView"  
 android:layout\_width="171dp"  
 android:layout\_height="128dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:srcCompat="@drawable/circlecropped" />  
  
 <TextView  
 android:id="@+id/textView10"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="148dp"  
 android:text="Currency Converter"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.524"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <EditText  
 android:id="@+id/Email"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:inputType="textEmailAddress"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorHint="@color/white"  
 android:textColorLink="@color/white"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.169"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView11" />  
  
 <TextView  
 android:id="@+id/textView11"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:text="Enter Your Email:"  
 android:textColor="@color/white"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.141"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView10" />  
  
 <TextView  
 android:id="@+id/textView12"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="20dp"  
 android:text="Enter Your Password:"  
 android:textColor="@color/white"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.122"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Email" />  
  
 <EditText  
 android:id="@+id/Password"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:ems="10"  
 android:inputType="textPassword"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorHint="@color/white"  
 android:textColorLink="@color/white"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.169"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView12" />  
  
 <Button  
 android:id="@+id/loginbtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="32dp"  
 android:background="#248e38"  
 android:text="LOG IN"  
 android:textColor="@color/white"  
 android:textStyle="bold"  
 app:backgroundTint="#248e38"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Password" />  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Pesofacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="148dp"  
 android:layout\_height="181dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="28dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/pesomoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT PHILIPPINE PESO"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="100dp"  
 android:text="Banknotes of the Philippine peso in use"  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="355dp"  
 android:layout\_height="79dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. The Philippines has a population of about 102 million inhabitants, being the 12th most populated country in the world. In addition, 11 million Filipinos are currently living abroad. "  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="356dp"  
 android:layout\_height="74dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text='2. The word "Philippines" derives from the name of King Felipe II of Spain (deformation of "Felipinas"). In addition, the official name of the Philippines has changed several times in the course of its history.'  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="358dp"  
 android:layout\_height="73dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text='3. Before 1967, the language used in the notes and coins of the Philippines was English. Then it was known as "Peso". But a short time later the name was used in Filipino, changing its name to the "Piso" currency.'  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
 <TextView  
 android:id="@+id/textView7"  
 android:layout\_width="359dp"  
 android:layout\_height="77dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="4. The Philippine peso has its origins in the Spanish Real of 8 and in the Mexican peso, which circulated widely throughout the Americas and Southeast Asia during the seventeenth and eighteenth centuries."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView6" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Pound**

*<?*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"  
 android:background="@drawable/moneybg"  
 tools:context=".Dollar">  
  
 <ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="28dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result"  
 app:srcCompat="@drawable/peso" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="60dp"  
 android:text="Currency Converter"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorLink="@color/white"  
 android:textSize="36sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ImageView  
 android:id="@+id/imageView3"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"  
 app:srcCompat="@drawable/pound" />  
  
 <EditText  
 android:id="@+id/Num1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="28dp"  
 android:ems="10"  
 android:inputType="number"  
 android:textColor="@color/white"  
 android:textColorHint="@color/white"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView" />  
  
 <Button  
 android:id="@+id/btnPeso"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="120dp"  
 android:layout\_marginRight="120dp"  
 android:text="Convert to Peso"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result" />  
  
 <Button  
 android:id="@+id/btnBaht"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="32dp"  
 android:text="CONVERT TO POUND"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.543"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/btnPeso" />  
  
 <TextView  
 android:id="@+id/Result"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="40dp"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Num1" />  
  
 <Button  
 android:id="@+id/btnfacts"  
 android:layout\_width="42dp"  
 android:layout\_height="52dp"  
 android:layout\_marginEnd="24dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="24dp"  
 android:background="@android:drawable/ic\_input\_get"  
 app:backgroundTint="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Poundfacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="157dp"  
 android:layout\_height="138dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="32dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/poundmoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT BRITISH POUND "  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="84dp"  
 android:text="Current pound sterling Banknotes"  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="357dp"  
 android:layout\_height="31dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. It is the oldest surviving independent currency. "  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="351dp"  
 android:layout\_height="42dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="2. Around 980 A.D. one pound could buy 15 heads of cattle.."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="358dp"  
 android:layout\_height="73dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="3. The English expression Spend a penny means going to the bathroom, and it originated from the need to pay one penny for the use of a public WC. This practice started during The Great Exhibition of 1851."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Ruble**

*<?*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"  
 android:background="@drawable/moneybg"  
 tools:context=".Dollar">  
  
 <ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="28dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result"  
 app:srcCompat="@drawable/peso" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="60dp"  
 android:text="Currency Converter"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorLink="@color/white"  
 android:textSize="36sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ImageView  
 android:id="@+id/imageView3"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"  
 app:srcCompat="@drawable/ruble" />  
  
 <EditText  
 android:id="@+id/Num1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="28dp"  
 android:ems="10"  
 android:inputType="number"  
 android:textColor="@color/white"  
 android:textColorHint="@color/white"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView" />  
  
 <Button  
 android:id="@+id/btnPeso"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="120dp"  
 android:layout\_marginRight="120dp"  
 android:text="Convert to Peso"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result" />  
  
 <Button  
 android:id="@+id/btnBaht"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="32dp"  
 android:text="CONVERT TO RUBLE"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.543"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/btnPeso" />  
  
 <TextView  
 android:id="@+id/Result"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="40dp"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Num1" />  
  
 <Button  
 android:id="@+id/btnfacts"  
 android:layout\_width="42dp"  
 android:layout\_height="52dp"  
 android:layout\_marginEnd="24dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="24dp"  
 android:background="@android:drawable/ic\_input\_get"  
 app:backgroundTint="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Rublefacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="186dp"  
 android:layout\_height="142dp"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/rublemoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT RUSSIAN RUBLE"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="80dp"  
 android:text="Current Russian rouble banknotes"  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="354dp"  
 android:layout\_height="41dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. After the fall of the Soviet Union in 1991, the rouble faced devaluation."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="353dp"  
 android:layout\_height="74dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="2. The current symbol for the rouble was chosen by Russian internet users through an online survey conducted by the Bank of Russia that lasted for a month."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="354dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="3. The first series of coins appearing in Russia, the Kuna (Russian name for Arab dirhams), were used in Novgorod during the VIII and IX centuries."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Swissfranc**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="186dp"  
 android:layout\_height="142dp"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/rublemoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT RUSSIAN RUBLE"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="80dp"  
 android:text="Current Russian rouble banknotes"  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="354dp"  
 android:layout\_height="41dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. After the fall of the Soviet Union in 1991, the rouble faced devaluation."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="353dp"  
 android:layout\_height="74dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="2. The current symbol for the rouble was chosen by Russian internet users through an online survey conducted by the Bank of Russia that lasted for a month."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="354dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="3. The first series of coins appearing in Russia, the Kuna (Russian name for Arab dirhams), were used in Novgorod during the VIII and IX centuries."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Swissfrancfacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="186dp"  
 android:layout\_height="142dp"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/swissfrancmoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT SWITZERLAND SWISS FRANC"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="80dp"  
 android:text="Current Swiss franc banknotes "  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="354dp"  
 android:layout\_height="41dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. ATMs located in banks are called bancomats and ATMs in post offices are called postomats."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="353dp"  
 android:layout\_height="74dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="2. Euros are accepted all over Switzerland, included most of hotels, some restaurants and souvenir shops. The change is given in Swiss francs according to daily exchange rates."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Turkishlira**

*<?*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"  
 android:background="@drawable/moneybg"  
 tools:context=".Dollar">  
  
 <ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="28dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result"  
 app:srcCompat="@drawable/peso" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="60dp"  
 android:text="Currency Converter"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorLink="@color/white"  
 android:textSize="36sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ImageView  
 android:id="@+id/imageView3"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"  
 app:srcCompat="@drawable/turkishlira" />  
  
 <EditText  
 android:id="@+id/Num1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="28dp"  
 android:ems="10"  
 android:inputType="number"  
 android:textColor="@color/white"  
 android:textColorHint="@color/white"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView" />  
  
 <Button  
 android:id="@+id/btnPeso"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="120dp"  
 android:layout\_marginRight="120dp"  
 android:text="Convert to Peso"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result" />  
  
 <Button  
 android:id="@+id/btnBaht"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="32dp"  
 android:text="CONVERT TO TURKISH LIRA"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.151"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/btnPeso" />  
  
 <TextView  
 android:id="@+id/Result"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="40dp"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Num1" />  
  
 <Button  
 android:id="@+id/btnfacts"  
 android:layout\_width="42dp"  
 android:layout\_height="52dp"  
 android:layout\_marginEnd="24dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="24dp"  
 android:background="@android:drawable/ic\_input\_get"  
 app:backgroundTint="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Turkishlirafacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="186dp"  
 android:layout\_height="142dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/turkishliramoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT TURKEY TURKISH LIRA"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="80dp"  
 android:text="Current Turkish lira Banknotes"  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="354dp"  
 android:layout\_height="24dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. The banknotes of 5 and 50 liras are very similar."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="351dp"  
 android:layout\_height="40dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="2. The name “lira” was first used by the Ottoman Empire, in 1844."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="349dp"  
 android:layout\_height="147dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="3. The new banknotes show the picture of Mustafa Kemal Atatürk, the founder of the Republic of Turkey, and the reverse, depending on the note’s denomination, you may see the İshak Paşa Palace near Doğubeyazıt, in Ephesus, Cappadocia, the map of Piri Reis, The Mausoleum of Atatürk and the Atatürk Reservoir dam, which was part of the GAP National Hydraulic Project in Şanlıurfa."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
 <TextView  
 android:id="@+id/textView13"  
 android:layout\_width="353dp"  
 android:layout\_height="79dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="4. The 1 lira coin has a diameter of 26.15 millimetres and a thickness of 1.95 millimetres, and a weight of 8.5 grams, dimensions similar to those of a 2 euro coin."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView6" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Won**

*<?*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"  
 android:background="@drawable/moneybg"  
 tools:context=".Dollar">  
  
 <ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="28dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result"  
 app:srcCompat="@drawable/peso" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="60dp"  
 android:text="Currency Converter"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorLink="@color/white"  
 android:textSize="36sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ImageView  
 android:id="@+id/imageView3"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"  
 app:srcCompat="@drawable/won" />  
  
 <EditText  
 android:id="@+id/Num1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="28dp"  
 android:ems="10"  
 android:inputType="number"  
 android:textColor="@color/white"  
 android:textColorHint="@color/white"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView" />  
  
 <Button  
 android:id="@+id/btnPeso"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="120dp"  
 android:layout\_marginRight="120dp"  
 android:text="Convert to Peso"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result" />  
  
 <Button  
 android:id="@+id/btnBaht"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="32dp"  
 android:text="CONVERT TO WON"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.074"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/btnPeso" />  
  
 <TextView  
 android:id="@+id/Result"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="40dp"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Num1" />  
  
 <Button  
 android:id="@+id/btnfacts"  
 android:layout\_width="42dp"  
 android:layout\_height="52dp"  
 android:layout\_marginEnd="24dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="24dp"  
 android:background="@android:drawable/ic\_input\_get"  
 app:backgroundTint="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Wonfacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="177dp"  
 android:layout\_height="154dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="24dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/wonmoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT SOUTH KOREAN WON"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="183dp"  
 android:layout\_height="70dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="72dp"  
 android:text="Banknotes of the South Korean Won in use"  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="350dp"  
 android:layout\_height="88dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text='1. The word "won" is a cognate term derived from the Chinese yuan and the Japanese yen, coins that have in common the same Chinese symbol, one that denotes the round property of an object (in this case, the coins).'  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="350dp"  
 android:layout\_height="25dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text='2. The term "jeon" means "money.'  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="360dp"  
 android:layout\_height="181dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="3. In 1946, the Bank of Joseon introduced notes of 10 and 100 won, followed in 1949 by the denominations of 5 and 1000. Their designs were similar to those of the Japanese notes of the period of the Japanese invasion, although there were two differences with these: the paulownia, emblem of the government of Japan, was replaced by a rose from Syria, the Korean national flower, and the text regarding the interchangeability of the won with the Japanese yen was eliminated."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
 <TextView  
 android:id="@+id/textView9"  
 android:layout\_width="377dp"  
 android:layout\_height="55dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="12dp"  
 android:text="4. In 1968, the brass with which the coin was made of 1 won exceeded in price the face value of it, so that this metal was replaced by aluminum."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView6" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Yen**

*<?*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"  
 android:background="@drawable/moneybg"  
 tools:context=".Dollar">  
  
 <ImageView  
 android:id="@+id/imageView2"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="28dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result"  
 app:srcCompat="@drawable/peso" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="60dp"  
 android:text="Currency Converter"  
 android:textColor="@color/white"  
 android:textColorHighlight="@color/white"  
 android:textColorLink="@color/white"  
 android:textSize="36sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <ImageView  
 android:id="@+id/imageView3"  
 android:layout\_width="65dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="44dp"  
 android:layout\_marginLeft="44dp"  
 android:layout\_marginTop="20dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView2"  
 app:srcCompat="@drawable/yen" />  
  
 <EditText  
 android:id="@+id/Num1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="28dp"  
 android:ems="10"  
 android:inputType="number"  
 android:textColor="@color/white"  
 android:textColorHint="@color/white"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView" />  
  
 <Button  
 android:id="@+id/btnPeso"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="36dp"  
 android:layout\_marginEnd="120dp"  
 android:layout\_marginRight="120dp"  
 android:text="Convert to Peso"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="1.0"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView2"  
 app:layout\_constraintTop\_toBottomOf="@+id/Result" />  
  
 <Button  
 android:id="@+id/btnBaht"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="32dp"  
 android:text="CONVERT TO YEN"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.074"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView3"  
 app:layout\_constraintTop\_toBottomOf="@+id/btnPeso" />  
  
 <TextView  
 android:id="@+id/Result"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="40dp"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.498"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/Num1" />  
  
 <Button  
 android:id="@+id/btnfacts"  
 android:layout\_width="42dp"  
 android:layout\_height="52dp"  
 android:layout\_marginEnd="24dp"  
 android:layout\_marginRight="24dp"  
 android:layout\_marginBottom="24dp"  
 android:background="@android:drawable/ic\_input\_get"  
 app:backgroundTint="@color/white"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

**Activity Yenfacts**

*<?*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"  
 android:background="@drawable/bg"  
 tools:context=".Pesofacts">  
  
  
 <ImageView  
 android:id="@+id/imageView4"  
 android:layout\_width="192dp"  
 android:layout\_height="184dp"  
 android:layout\_marginStart="24dp"  
 android:layout\_marginLeft="24dp"  
 android:layout\_marginTop="24dp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/button"  
 app:srcCompat="@drawable/yenmoney" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="61dp"  
 android:layout\_height="66dp"  
 android:layout\_marginStart="36dp"  
 android:layout\_marginLeft="36dp"  
 android:layout\_marginTop="24dp"  
 android:background="?android:attr/actionModeFindDrawable"  
 app:backgroundTint="@android:color/background\_dark"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="273dp"  
 android:layout\_height="56dp"  
 android:layout\_marginStart="12dp"  
 android:layout\_marginLeft="12dp"  
 android:layout\_marginTop="24dp"  
 android:text="FACTS ABOUT JAPANESE YEN"  
 android:textColor="@color/white"  
 android:textSize="24sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/button"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView3"  
 android:layout\_width="185dp"  
 android:layout\_height="52dp"  
 android:layout\_marginStart="8dp"  
 android:layout\_marginLeft="8dp"  
 android:layout\_marginTop="80dp"  
 android:text="Current yen banknotes "  
 android:textColor="@color/white"  
 android:textSize="18sp"  
 android:textStyle="bold"  
 app:layout\_constraintStart\_toEndOf="@+id/imageView4"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView2" />  
  
 <TextView  
 android:id="@+id/textView4"  
 android:layout\_width="348dp"  
 android:layout\_height="24dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="1. The 1 yen coin weighs one gram."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/imageView4" />  
  
 <TextView  
 android:id="@+id/textView5"  
 android:layout\_width="350dp"  
 android:layout\_height="51dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="2. The image on the reverse side of the 5,000 yen banknote is the painting “The Kakitsubata Flowers”, by Ōgata Kōrin."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView4" />  
  
 <TextView  
 android:id="@+id/textView6"  
 android:layout\_width="354dp"  
 android:layout\_height="58dp"  
 android:layout\_marginStart="16dp"  
 android:layout\_marginLeft="16dp"  
 android:layout\_marginTop="16dp"  
 android:text="3. Higher denominations of yen are counted in multiples of 10.000, whereas in most Western countries they are counted by thousands."  
 android:textColor="@color/white"  
 android:textSize="15sp"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toBottomOf="@+id/textView5" />  
  
</androidx.constraintlayout.widget.ConstraintLayout>

**JAVA**

**MainActivity**

package com.example.currencyconverter;  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.ProgressBar;  
import android.widget.Toast;  
  
import com.google.android.gms.tasks.OnCompleteListener;  
import com.google.android.gms.tasks.Task;  
import com.google.firebase.auth.AuthResult;  
import com.google.firebase.auth.FirebaseAuth;  
  
public class MainActivity extends AppCompatActivity {  
  
 private EditText editTextName, editTextEmail, editTextPassword, editTextConfirmPassword;  
 private Button btnRegister, btnLogin;  
 private ProgressBar progressBar;  
  
 FirebaseAuth firebaseAuth;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 *//Int* editTextName = findViewById(R.id.*editTextName*);  
 editTextEmail = findViewById(R.id.*editTextEmail*);  
 editTextPassword = findViewById(R.id.*editTextPassword*);  
 editTextConfirmPassword = findViewById(R.id.*editTextConfirmPassword*);  
 btnLogin = findViewById(R.id.*btnLogin*);  
 btnRegister = findViewById(R.id.*btnRegister*);  
  
  
 progressBar = findViewById(R.id.*progressBar*);  
 *//Firebase int* firebaseAuth = FirebaseAuth.*getInstance*();  
 *//onclick listener at btnRegister* btnRegister.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 progressBar.setVisibility(View.*VISIBLE*);  
 firebaseAuth.createUserWithEmailAndPassword( editTextEmail.getText().toString(), editTextPassword.getText().toString())  
 .addOnCompleteListener(new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 progressBar.setVisibility(View.*GONE*);  
  
 if (task.isSuccessful()) {  
 firebaseAuth.getCurrentUser().sendEmailVerification().addOnCompleteListener(new OnCompleteListener<Void>() {  
 @Override  
 public void onComplete(@NonNull Task<Void> task) {  
 if (task.isSuccessful()){  
 Toast.makeText(MainActivity.this, "Registered successfully.Please Check your email for verification",  
 Toast.LENGTH\_SHORT).show();  
 editTextEmail.setText("");  
 editTextPassword.setText("");  
 }  
  
 }  
 });  
  
 } else {  
 Toast.makeText(MainActivity.this, task.getException().getMessage(), Toast.LENGTH\_SHORT).show();  
  
 }  
  
 }  
 });  
 }  
  
  
 });  
  
 btnLogin.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
 openLogIn();  
 }  
 });  
 }  
  
 private void openLogIn()  
 {  
 Intent intent = new Intent(this, LogIn.class);  
 startActivity(intent);  
 }  
}

**Baht**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Baht extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnBaht, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_baht*);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnBaht = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 1.54);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnBaht.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.65);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Baht.this, Bahtfacts.class);  
  
 startActivity(act2);  
 }  
 });  
 }  
}

**Dollar**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Dollar extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnDollar, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_dollar*);  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnDollar = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
@Override  
public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 50.44);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnDollar.setOnClickListener(new View.OnClickListener() {  
@Override  
public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.020);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Dollar.this, Dollarfacts.class);  
  
 startActivity(act2);  
 }  
 });  
  
 }  
 }

**Euro**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Euro extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnEuro, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_euro);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnEuro = findViewById(R.id.*btnEuro*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 59.53);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnEuro.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.017);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Euro.this, Eurofacts.class);  
  
 startActivity(act2);  
 }  
 });  
 }  
}

**Homepage**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.ImageView;  
  
public class Homepage extends AppCompatActivity {  
  
 ImageView imageViewdollar, imageViewpound, imageVieweuro, imageViewruble, imageViewwon, imageViewyen, imageViewturkishlira, imageViewswissfranc, imageViewbaht;  
 Button btnfacts, btnlogout;  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_homepage*);  
  
 imageViewdollar = findViewById(R.id.*imageViewdollar*);  
 imageViewpound = findViewById(R.id.*imageViewpound*);  
 imageVieweuro = findViewById(R.id.*imageVieweuro*);  
 imageViewruble = findViewById(R.id.*imageViewruble*);  
 imageViewwon = findViewById(R.id.*imageViewwon*);  
 imageViewyen = findViewById(R.id.*imageViewyen*);  
 imageViewturkishlira = findViewById(R.id.*imageViewturkishlira*);  
 imageViewswissfranc = findViewById(R.id.*imageViewswissfranc*);  
 imageViewbaht = findViewById(R.id.*imageViewbaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
 btnlogout = findViewById(R.id.*btnlogout*);  
  
  
 imageViewdollar.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Dollar.class);  
  
 startActivity(act2);  
 }  
 });  
  
  
 imageViewpound.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Pound.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageVieweuro.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Euro.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageViewruble.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Ruble.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageViewwon.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Won.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageViewyen.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Yen.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageViewturkishlira.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Turkishlira.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageViewswissfranc.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Swissfranc.class);  
  
 startActivity(act2);  
 }  
 });  
  
 imageViewbaht.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Baht.class);  
  
 startActivity(act2);  
 }  
 });  
  
 btnlogout.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, MainActivity.class);  
  
 startActivity(act2);  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Homepage.this, Pesofacts.class);  
  
 startActivity(act2);  
 }  
 });  
  
 }  
}

**Login**

package com.example.currencyconverter;  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.text.TextUtils;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
import com.google.android.gms.tasks.OnCompleteListener;  
import com.google.android.gms.tasks.Task;  
import com.google.firebase.auth.AuthResult;  
import com.google.firebase.auth.FirebaseAuth;  
import com.google.firebase.database.DatabaseReference;  
import com.google.firebase.database.FirebaseDatabase;  
  
import java.util.HashMap;  
  
public class LogIn extends AppCompatActivity {  
  
 EditText Email, Password;  
 Button loginbtn;  
 FirebaseAuth firebaseAuth;  
  
 FirebaseDatabase firebaseDatabase;  
 private FirebaseDatabase db = FirebaseDatabase.*getInstance*();  
 private DatabaseReference root = db.getReference().child("users");  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_log\_in);  
  
 Email = findViewById(R.id.Email);  
 Password = findViewById(R.id.Password);  
 loginbtn = findViewById(R.id.loginbtn);  
 firebaseAuth = FirebaseAuth.getInstance();  
  
  
 loginbtn.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 String txtEmail = Email.getText().toString();  
  
  
  
 HashMap<String, String> userMap = new HashMap<>();  
 userMap.put("Email", txtEmail);  
 root.push().setValue(userMap);  
  
  
  
  
 String email = Email.getText().toString().trim();  
 String password = Password.getText().toString().trim();  
  
 if (email.isEmpty()) {  
 Email.setError("Please Fillup with Corressponding Data");  
 return;  
 }  
  
 else if (TextUtils.isEmpty(password)) {  
 Password.setError("Password is Required");  
 return;  
 }  
 else if (password.length() < 6) {  
 Password.setError("Password is greater than 10");  
 return;  
 }  
  
 firebaseAuth.signInWithEmailAndPassword(email,password).addOnCompleteListener(new OnCompleteListener<AuthResult>() {  
 @Override  
 public void onComplete(@NonNull Task<AuthResult> task) {  
 if (task.isSuccessful()){  
 Toast.makeText(LogIn.this, "Logged in Successfully", Toast.LENGTH\_SHORT).show();  
 startActivity(new Intent(getApplicationContext(),Homepage.class));  
  
 }  
 else {  
 Toast.makeText(LogIn.this, "ERROR" + task.getException().getMessage(), Toast.LENGTH\_SHORT).show();  
 }  
  
 }  
 });  
 }  
 });  
  
  
  
  
  
 }  
  
}

**Pound**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Pound extends AppCompatActivity {  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnPound, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_pound*);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnPound = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 69.36);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnPound.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.014);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Pound.this, Poundfacts.class);  
  
 startActivity(act2);  
 }  
 });  
 }  
}

**Ruble**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Ruble extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnRuble, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.activity\_ruble);  
  
 Num1 = findViewById(R.id.Num1);  
 Result = findViewById(R.id.Result);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnRuble = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.68);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnRuble.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 1.47);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Ruble.this, Rublefacts.class);  
  
 startActivity(act2);  
 }  
 });  
 }  
}

**Swissfranc**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Swissfranc extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnSwissfranc, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_swissfranc*);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnSwissfranc = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 54.79);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnSwissfranc.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.018);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Swissfranc.this, Swissfrancfacts.class);  
  
 startActivity(act2);  
 }  
 });  
  
 }  
}

**Turkishlira**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Turkishlira extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnTurkishlira, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_turkishlira*);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnTurkishlira = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 5.91);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnTurkishlira.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.17);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Turkishlira.this, Turkishlirafacts.class);  
  
 startActivity(act2);  
 }  
 });  
 }  
}

**Won**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Won extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnWon, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_won*);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnWon = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.044);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnWon.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 22.71);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Won.this, Wonfacts.class);  
  
 startActivity(act2);  
 }  
 });  
 }  
}

**Yen**

package com.example.currencyconverter;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
  
public class Yen extends AppCompatActivity {  
  
 EditText Num1;  
 TextView Result;  
 Button btnPeso, btnYen, btnfacts;  
  
 int num1;  
 float result\_num;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_yen*);  
  
 Num1 = findViewById(R.id.*Num1*);  
 Result = findViewById(R.id.*Result*);  
 btnPeso = findViewById(R.id.*btnPeso*);  
 btnYen = findViewById(R.id.*btnBaht*);  
 btnfacts = findViewById(R.id.*btnfacts*);  
  
 btnPeso.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 0.46);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnYen.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 num1 = Integer.*parseInt*(Num1.getText().toString());  
 result\_num = (float) (num1 \* 2.18);  
 Result.setText(String.*valueOf*(result\_num));  
 }  
 });  
  
 btnfacts.setOnClickListener(new View.OnClickListener() {  
 public void onClick(View v) {  
 Intent act2 = new Intent(Yen.this, Yenfacts.class);  
  
 startActivity(act2);  
 }  
 });  
  
 }  
}