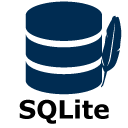
# Chapter 4: Implementation

## 4.1 Introduction

After Analysis and Design, Implementation is the 3rd phase of the software development lifecycle. This is the phase in which the execution of plan occurs accordingly and covers the coding portion of the project. Here the project team build the actual product. Implementation takes all possible steps to ensure the upcoming system development and transaction occurs smoothly, efficiently and flawlessly.

## 4.2 Programming Language

 I have chosen Android and JAVA as the programming language because JAVA is the official language for android development. JAVA is the first and most preferable programming language to build android application. JAVA programming language is belongs among top 10 programming languages.

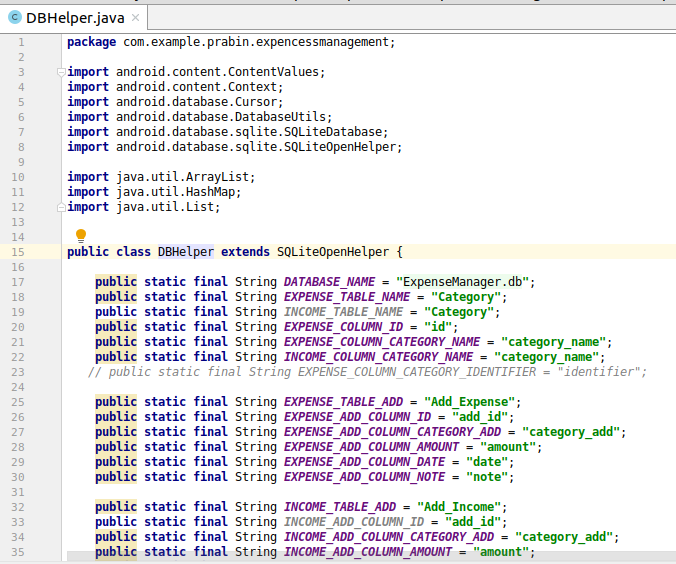
In case of database, I have chosen SQLite Database and for registration and login, I have used firebase database. SQLite Database is an open source database. SQLite database is the most deployed database engine in the world. It is server less i.e. to operate it does not need separate server or system and do not require setup or administration. In a SQLite database, multiple tables, indices, triggers and views hold in a single disk file.

**Note:**

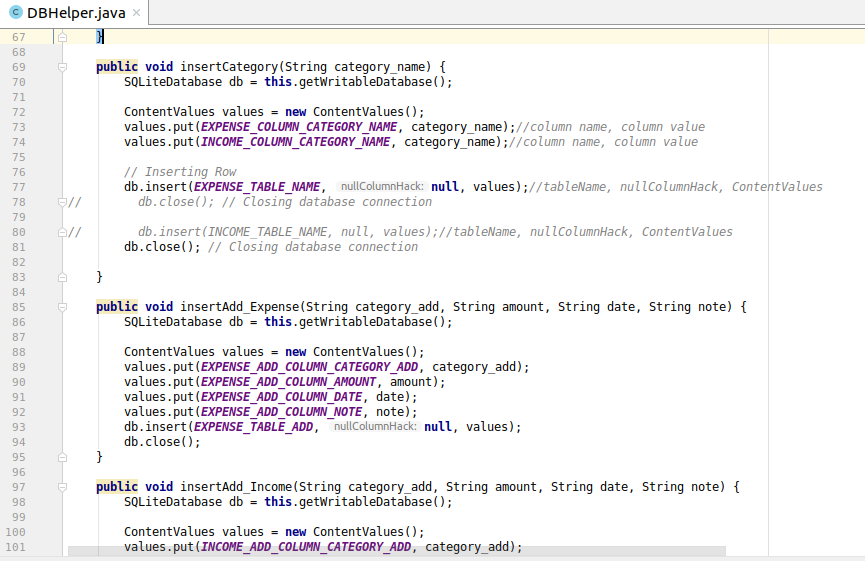
**In Android Development, .xml file represents the view, getter, setter represents the controller and the remaining portion of the code represents the Model.**

**Coding and UI Portion:**

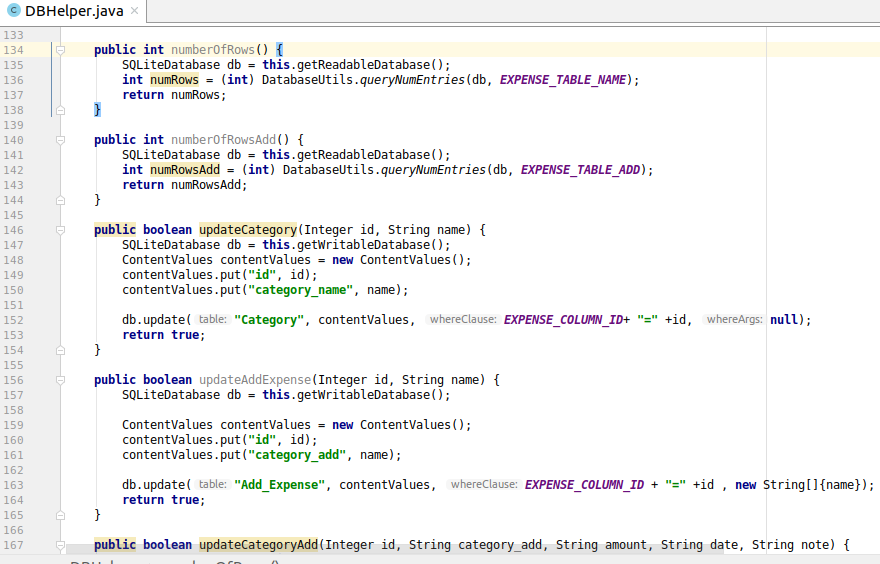
* **Database:**

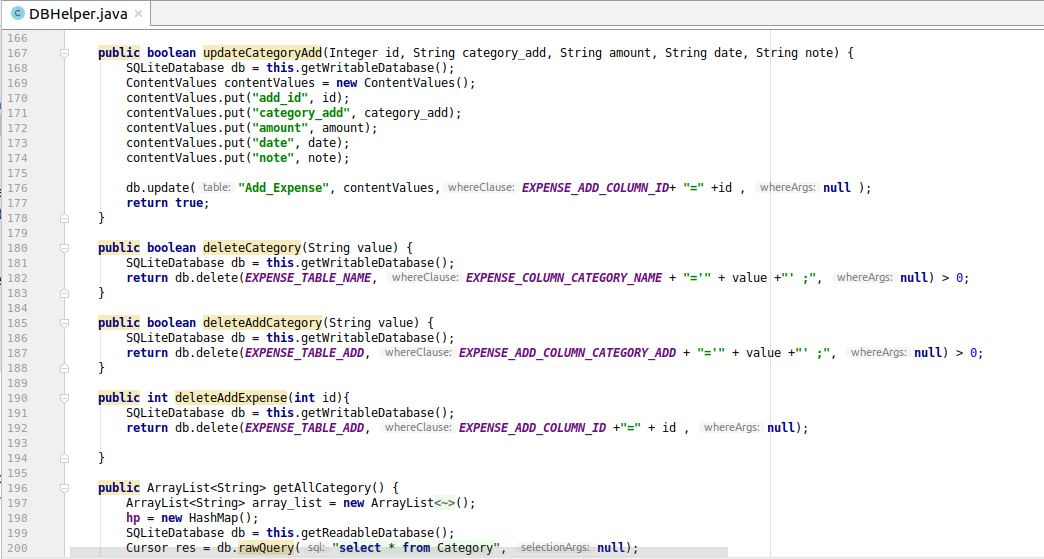
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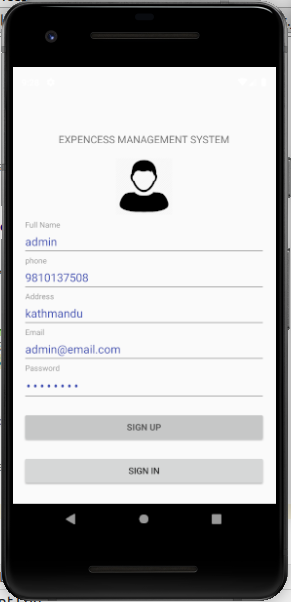
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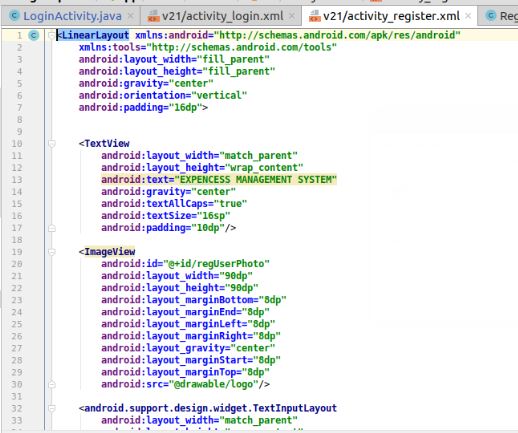
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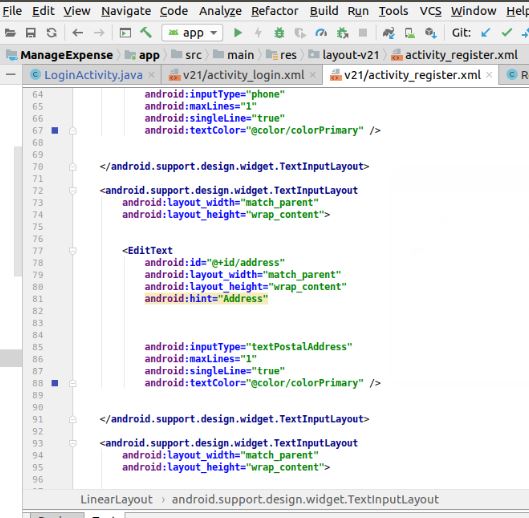
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1. **Registration form and their code:**

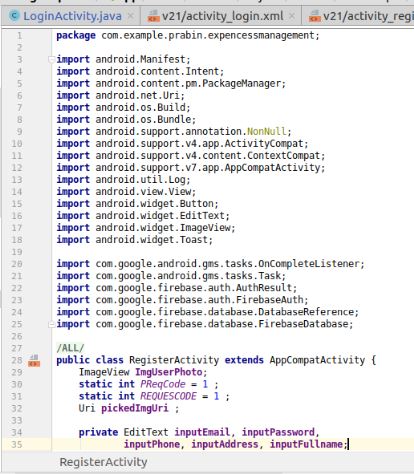
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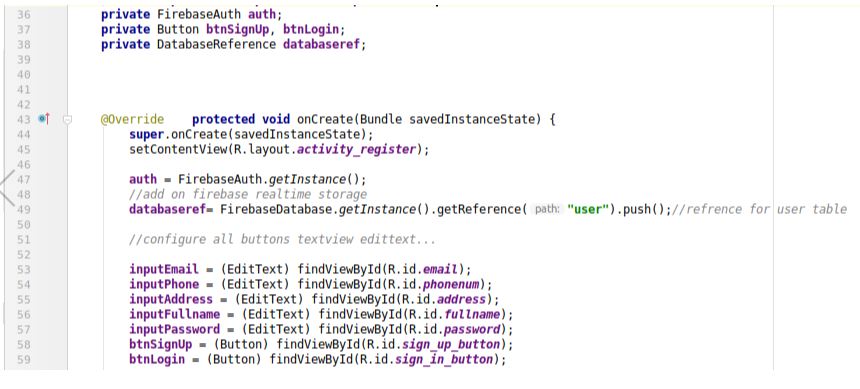
**** **XML code for registration:**

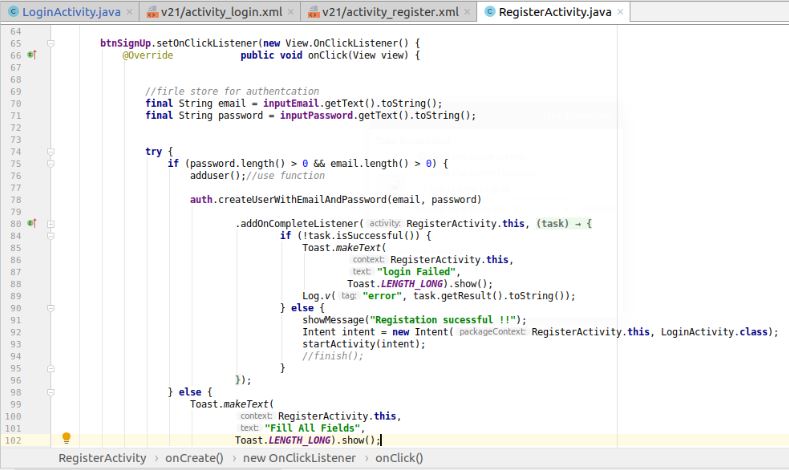


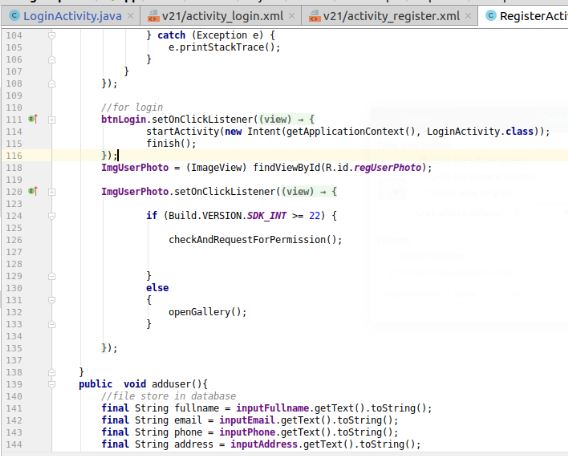


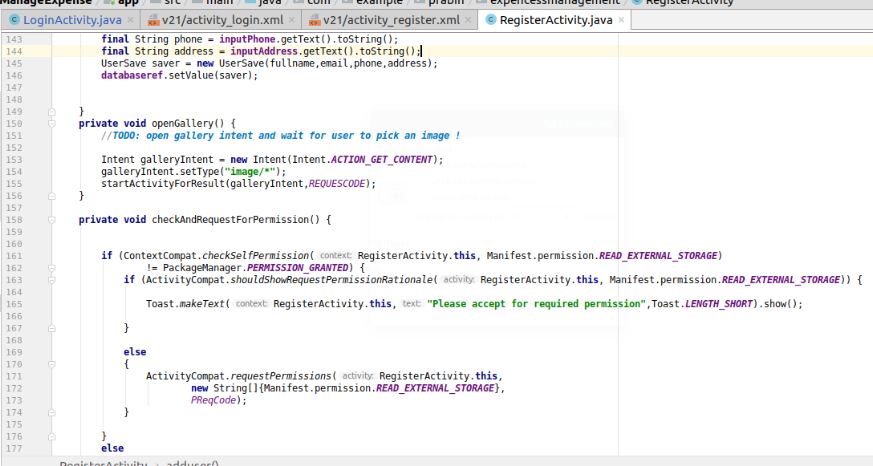


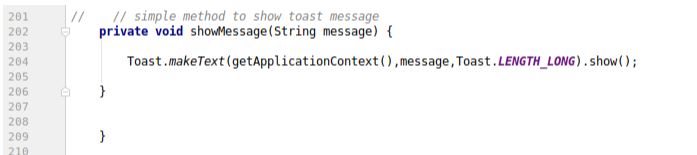
** Code for registration:**



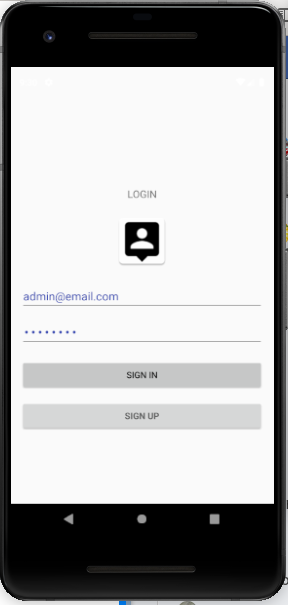


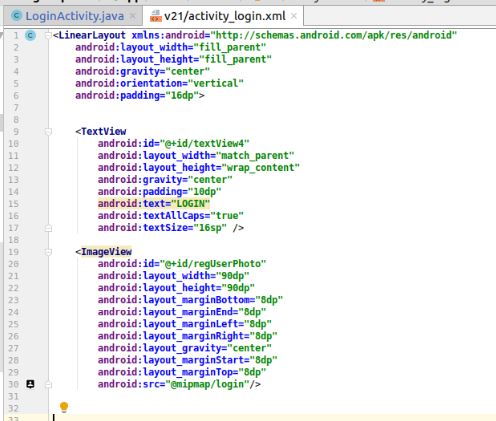


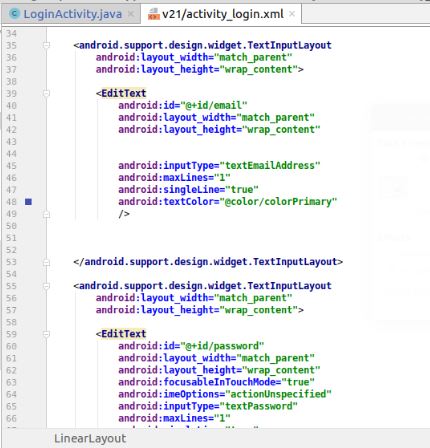




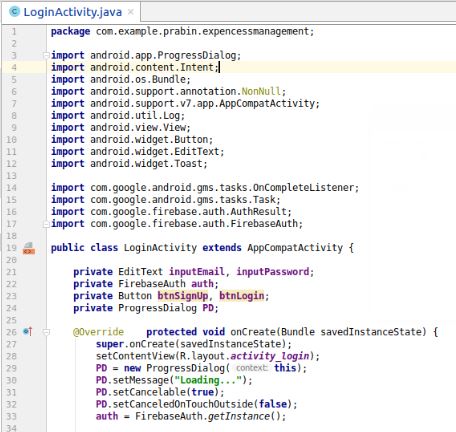
1. **Login form and their code:**

****

**XML code for login:**



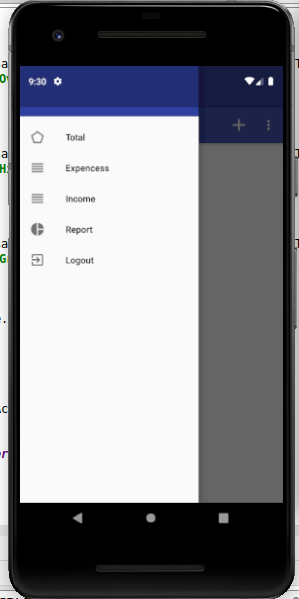


** Code for login:**



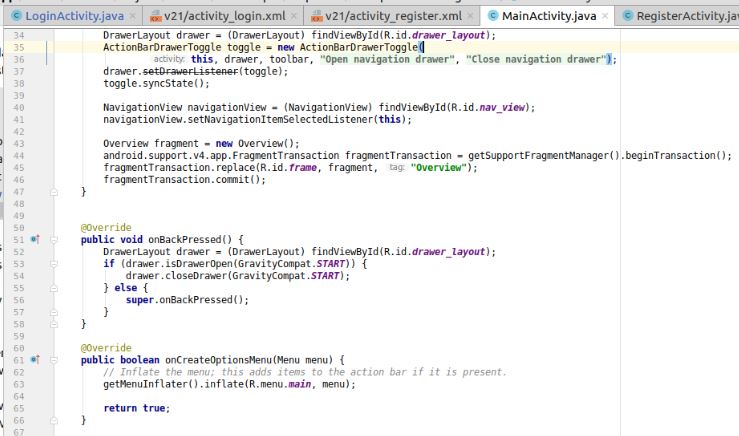


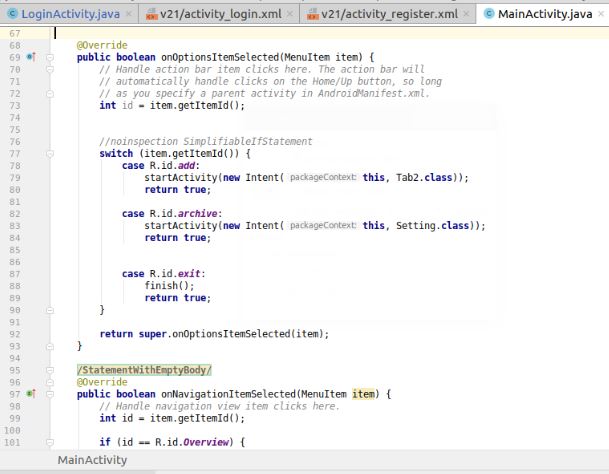
1. **Main Activity form and their code:**



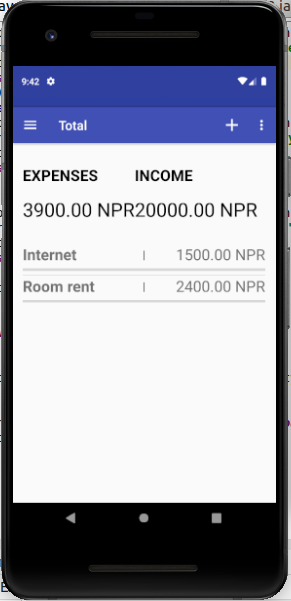
**XML code for Main Activity**:

**Code for Main Activity:**

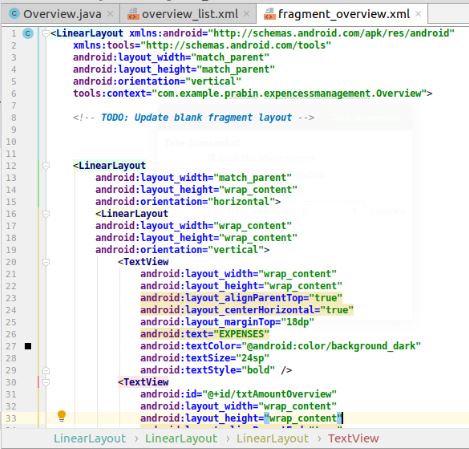
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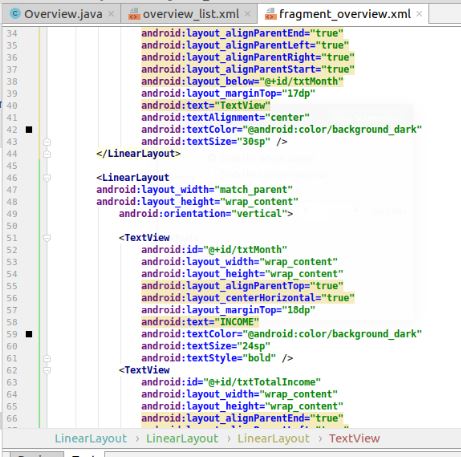
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1. **Total expenses and income form with their code**

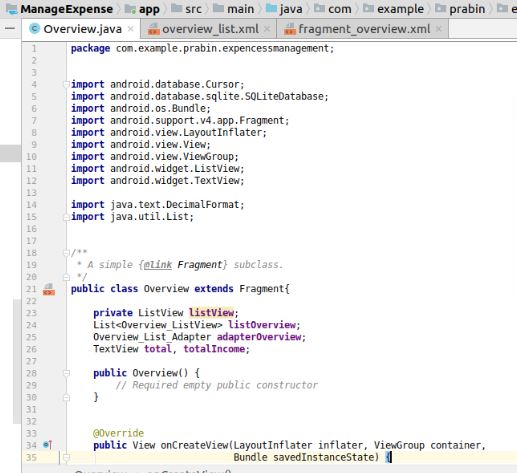
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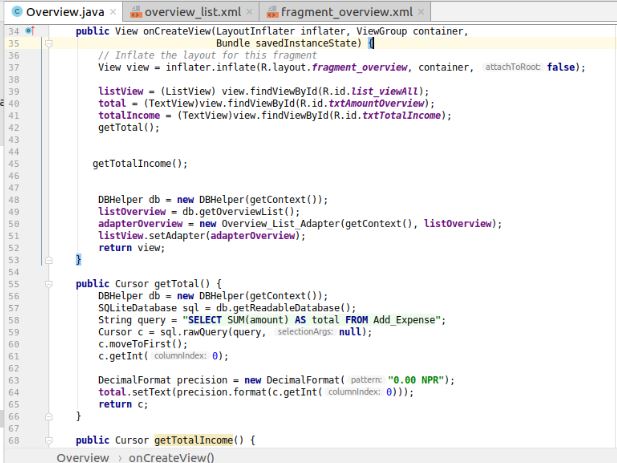
**XML code for total expenses and income:**

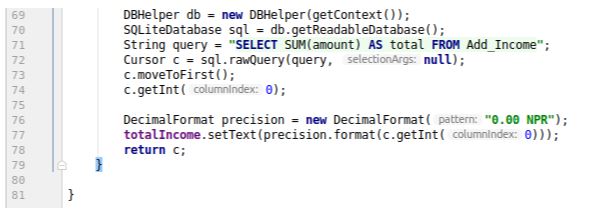




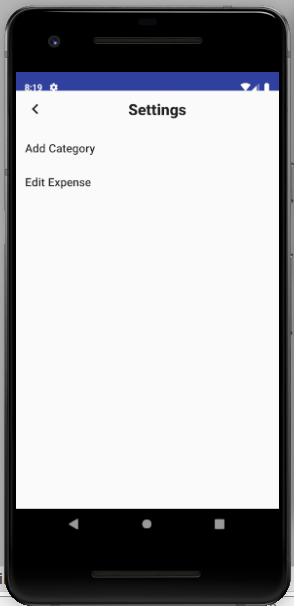


**Code for total expenses and income:**

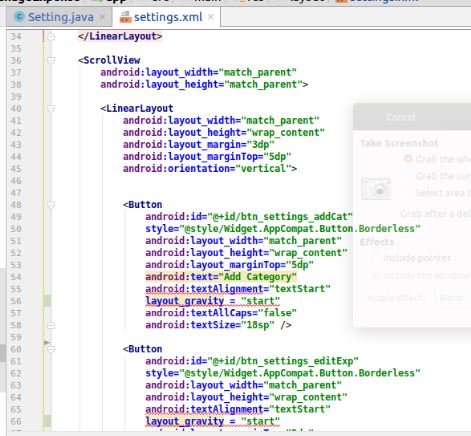




1. **Settings form with their code**

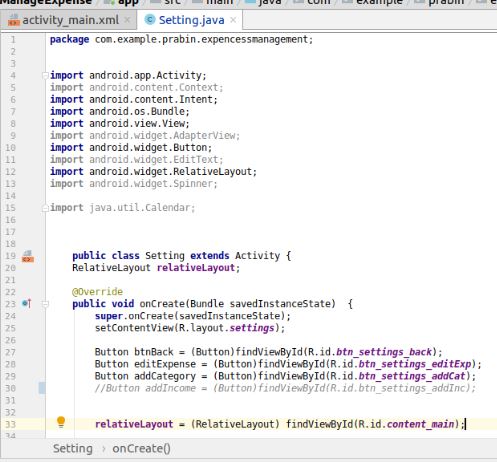


**XML code for setting:**

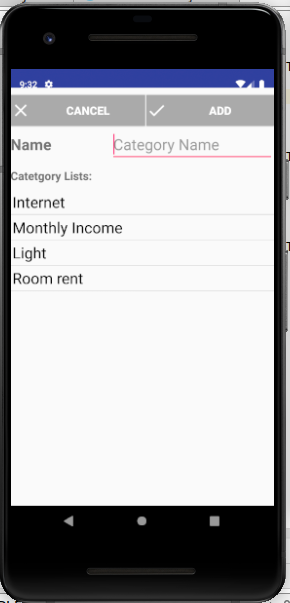


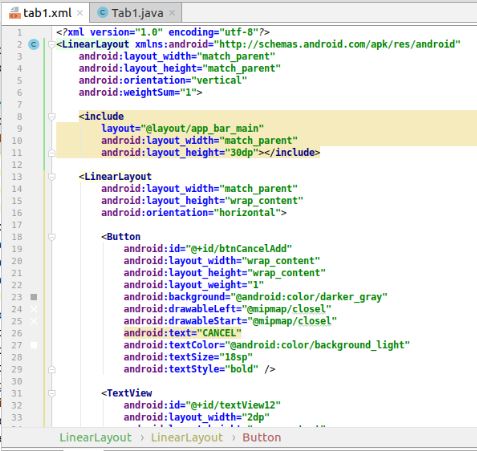


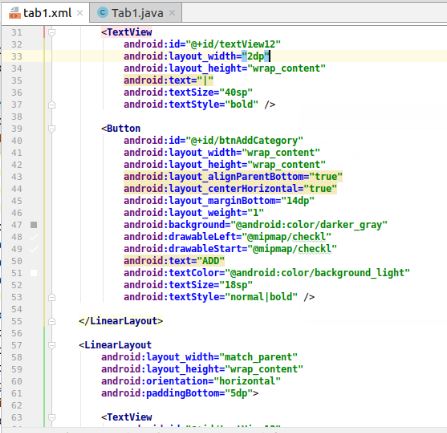
**Code for setting:**

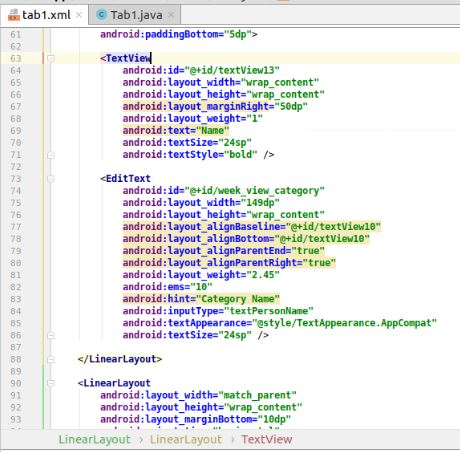


1. **Add category form with their code**

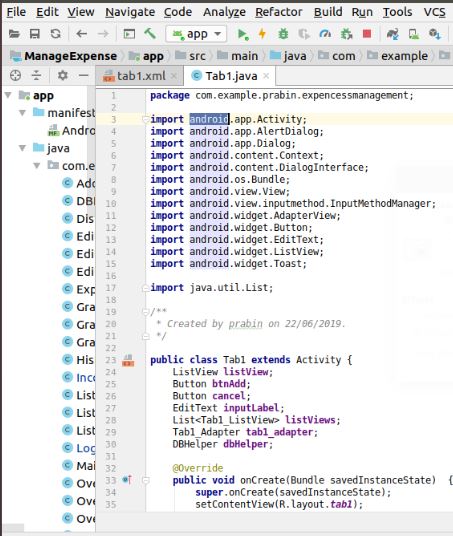
**XML Code for add category**:

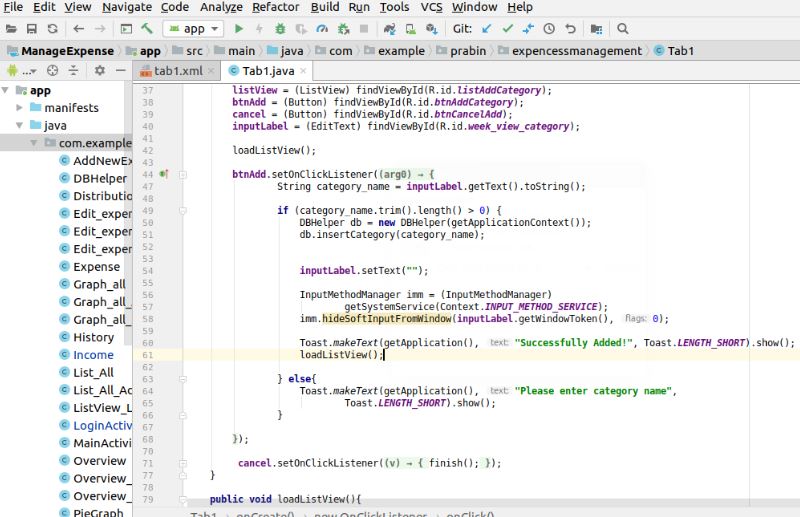








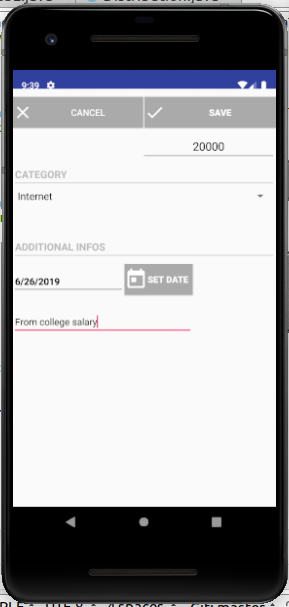
 **Code for add category:**



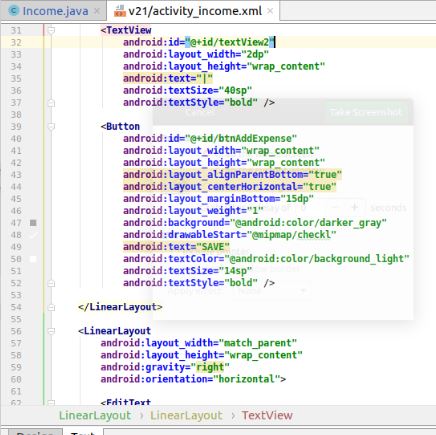


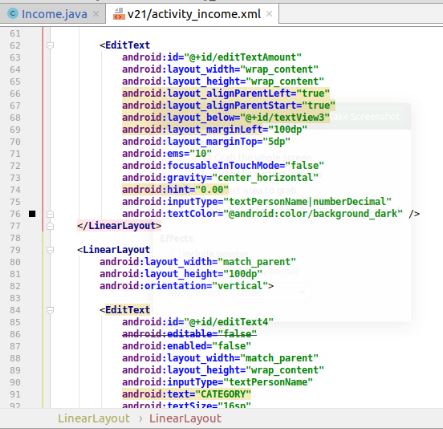


1. **Add income form with their code:**

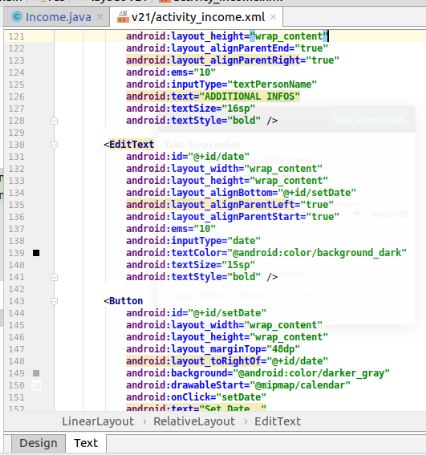


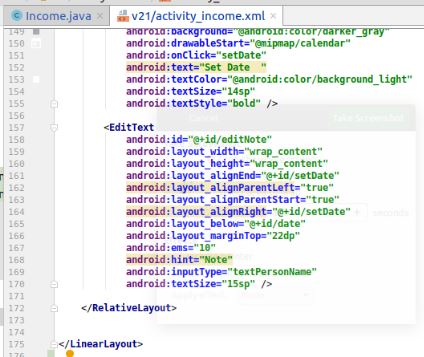
**XML code for add income**:

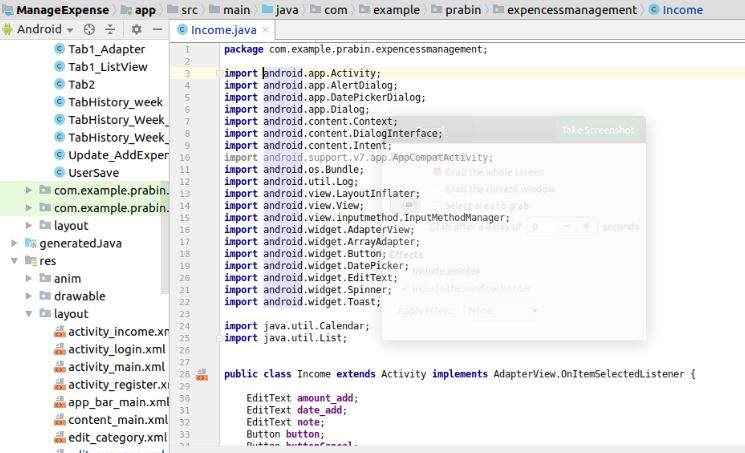


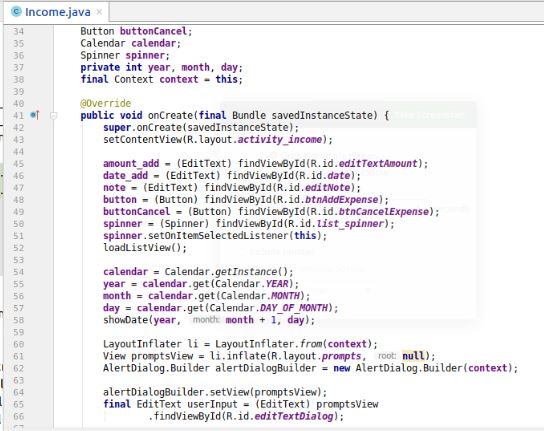


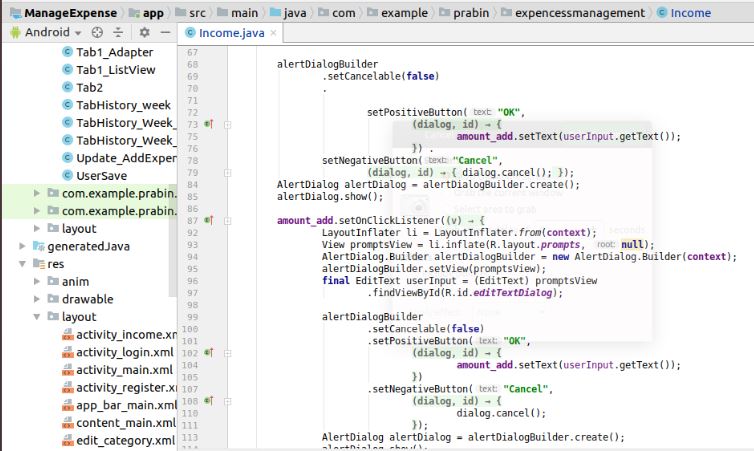


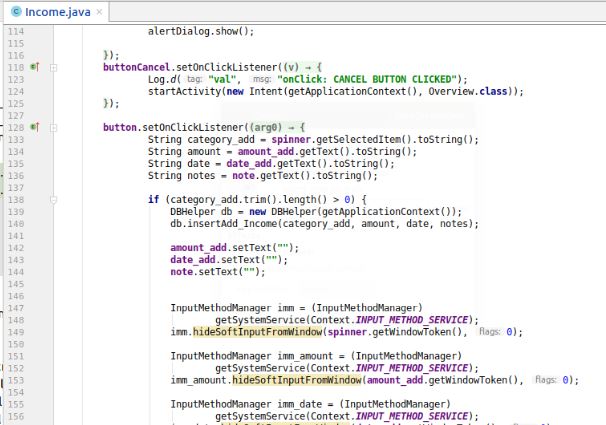


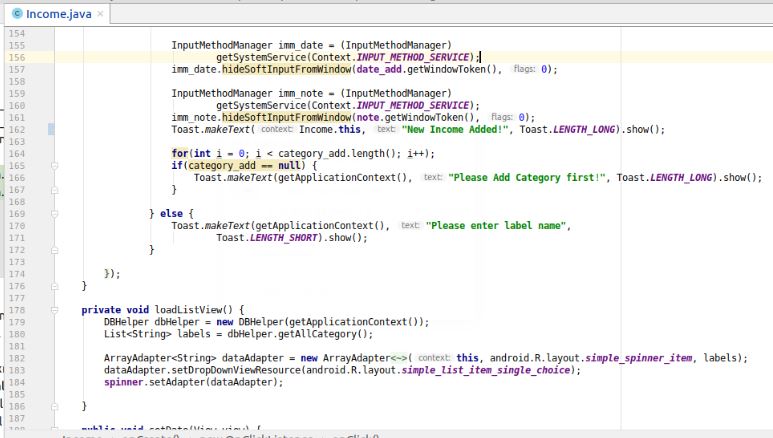


**Code for add income:**





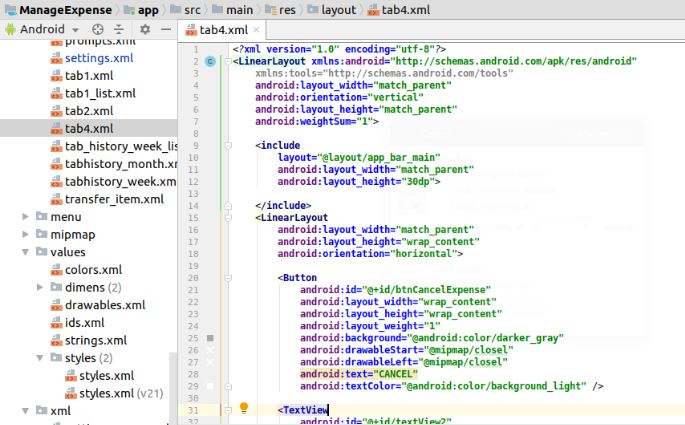


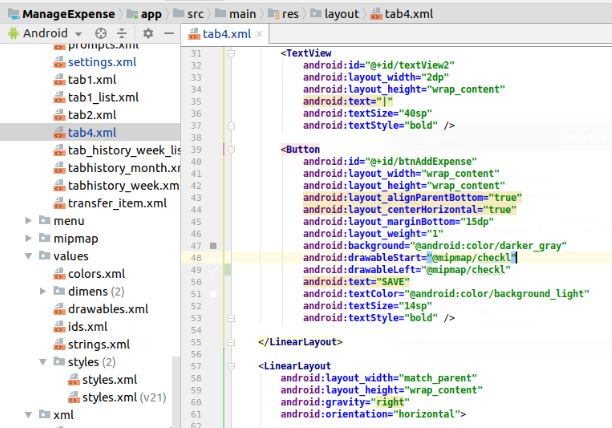


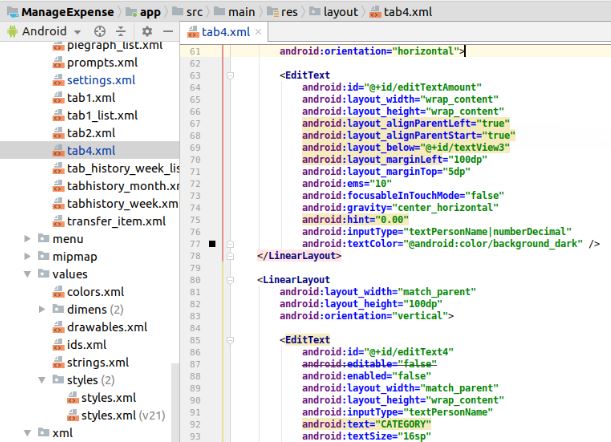


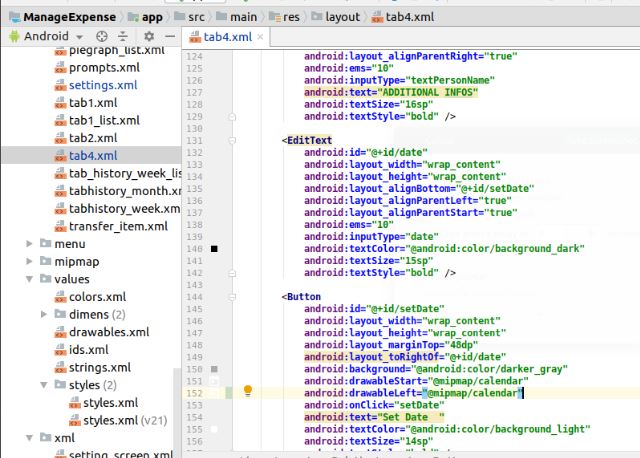
1. **Add expenses form with their code:**

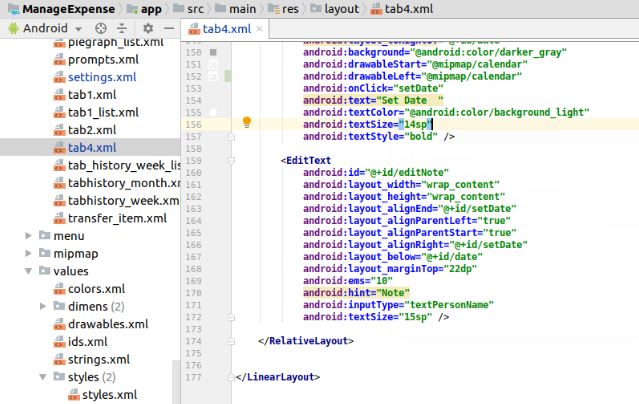


**XML code for expenses**:

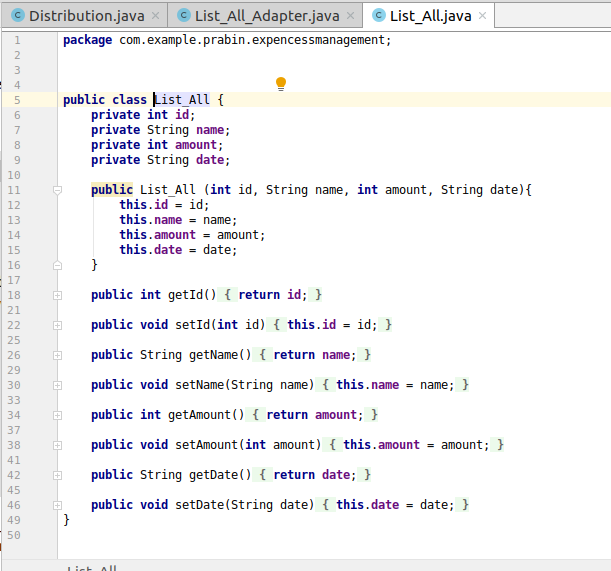


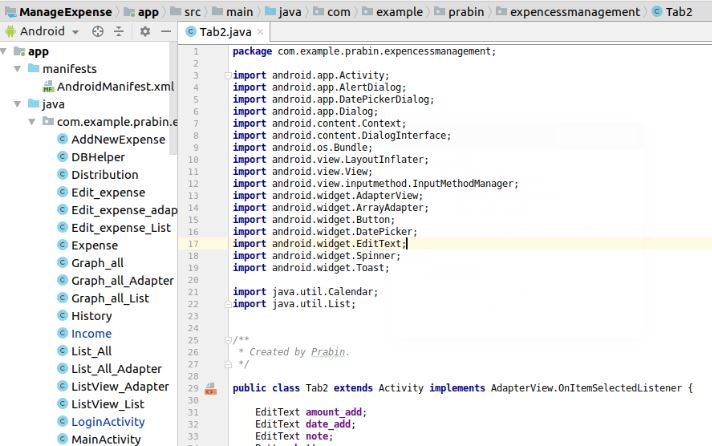


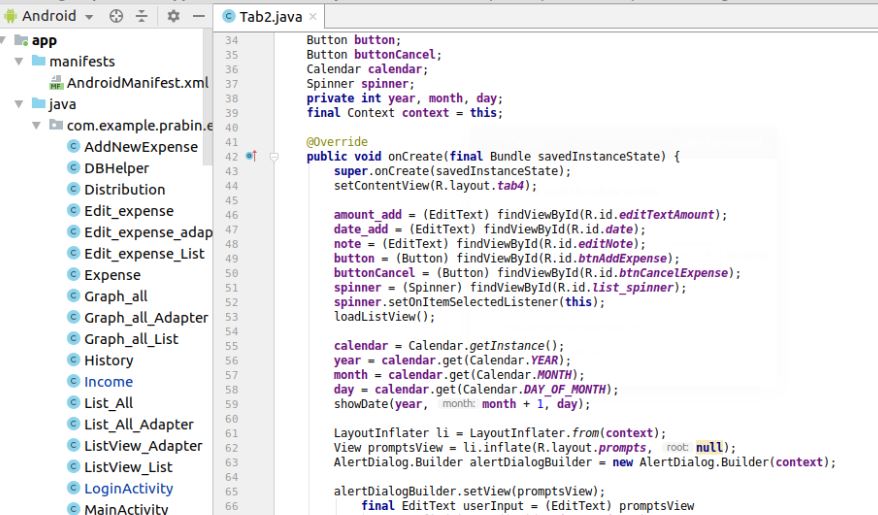


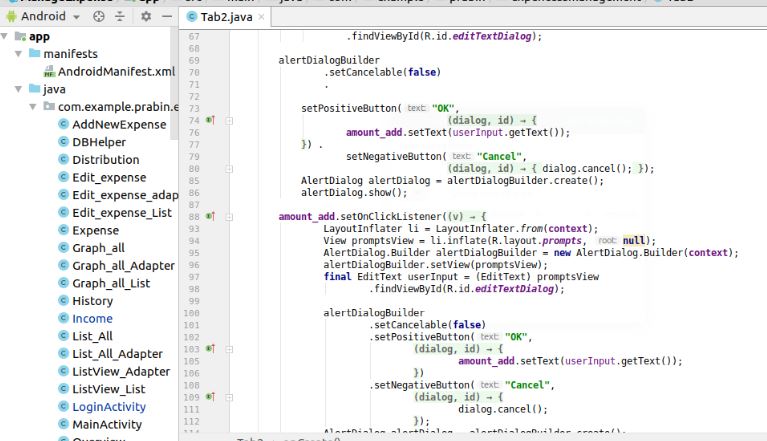


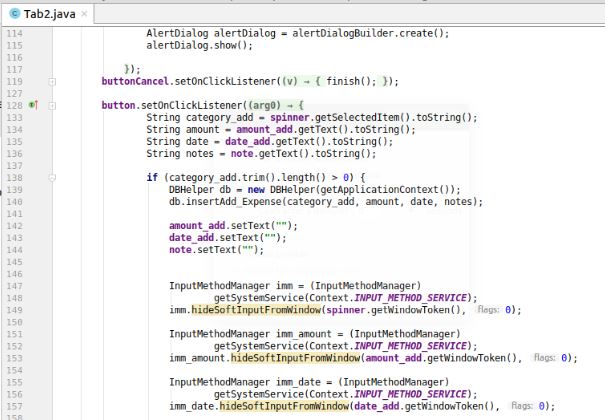
**Code for add expenses:**

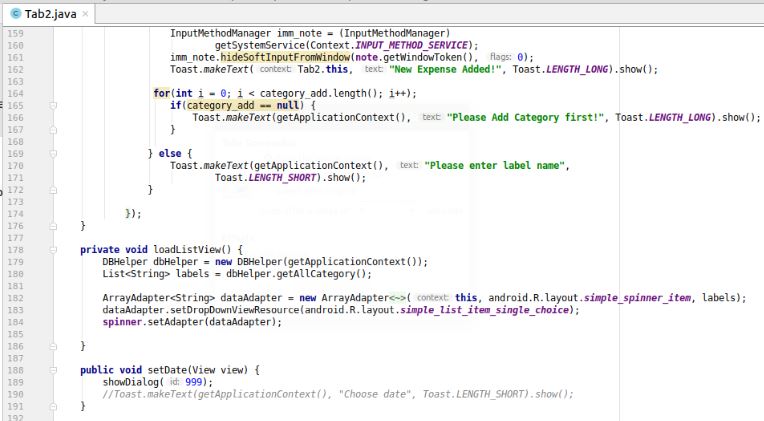
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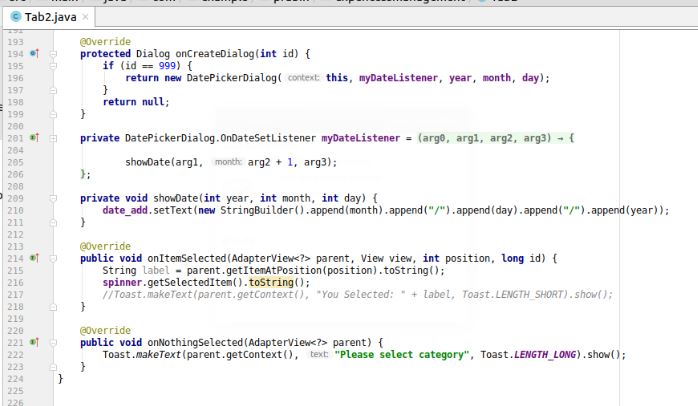






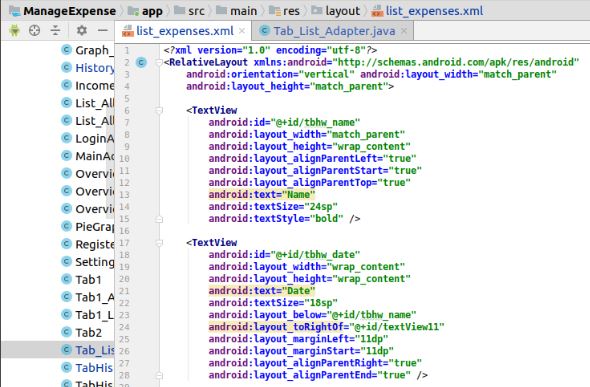


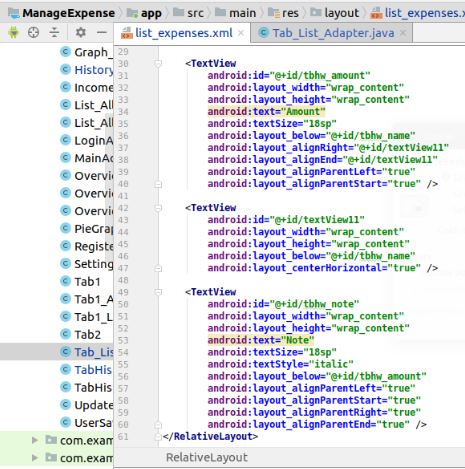


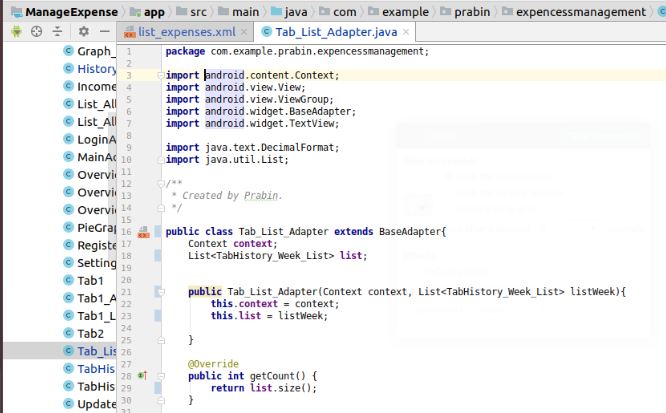
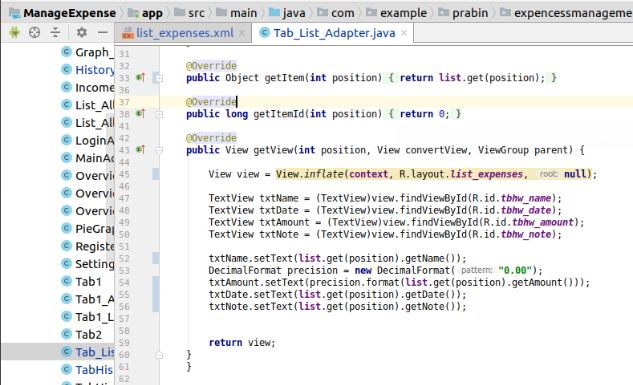


1. **Add expenses list form with their code:**

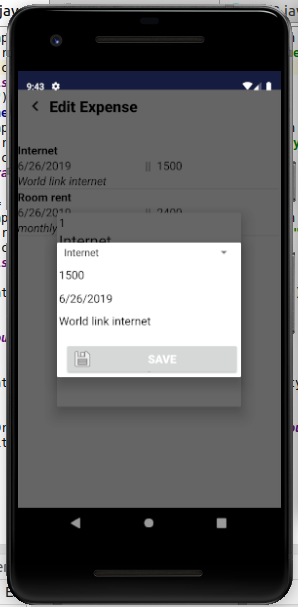


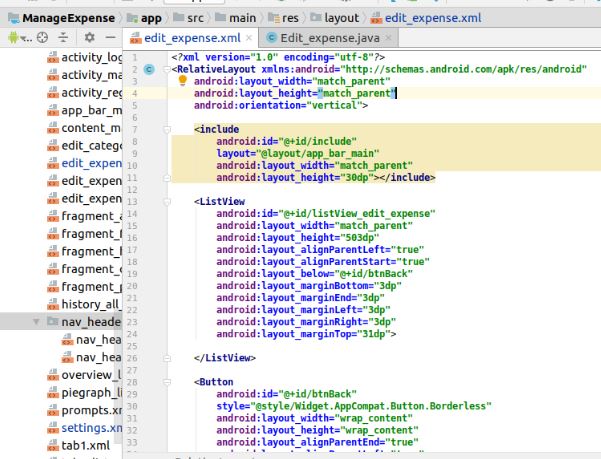
**XML Code for list of expenses:**

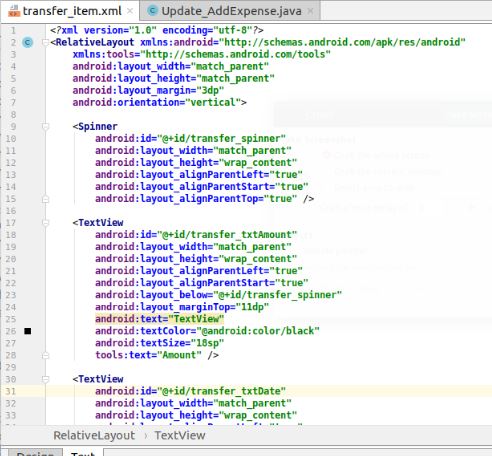


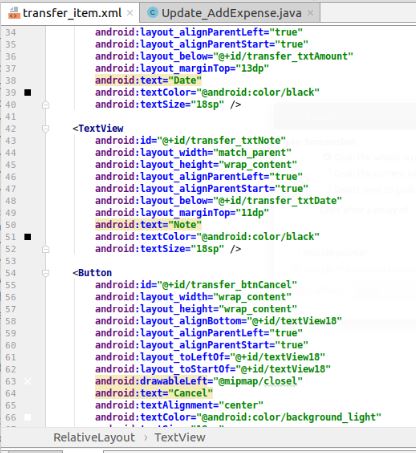
**Code for list of expenses:**

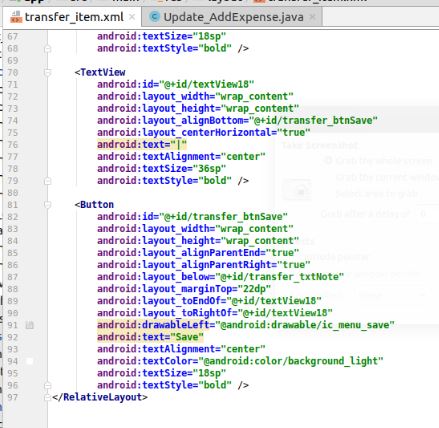
1. **Edit expenses form with their code:**

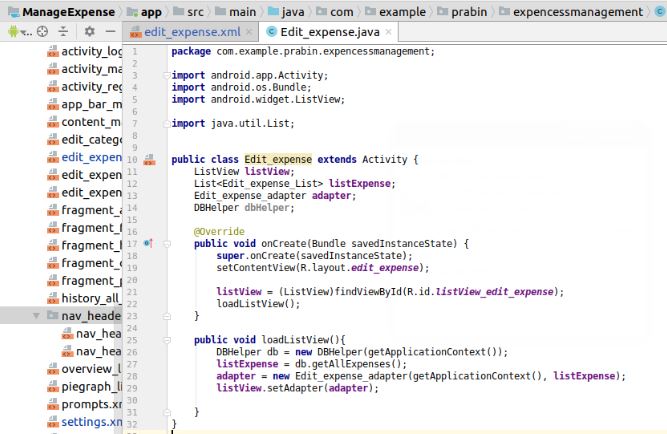


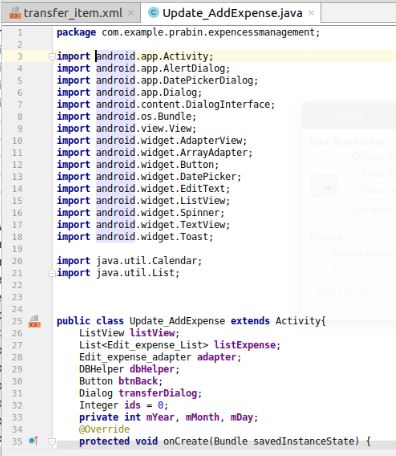
**XML code for edit expenses**.

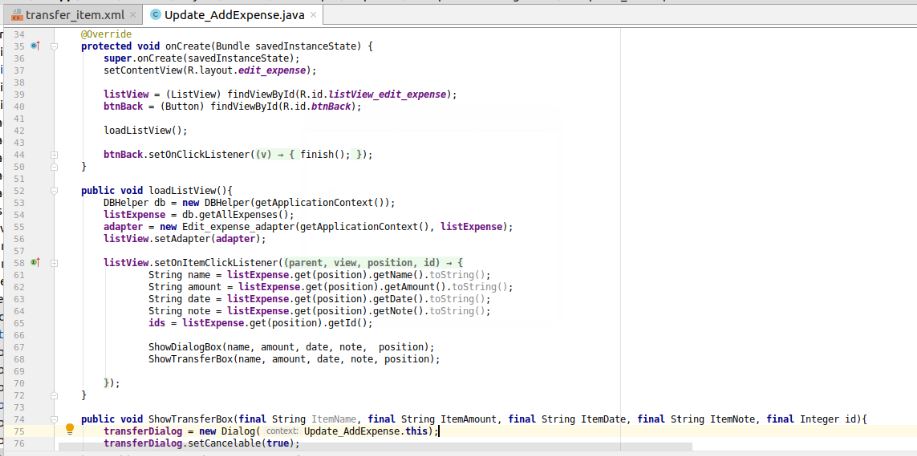
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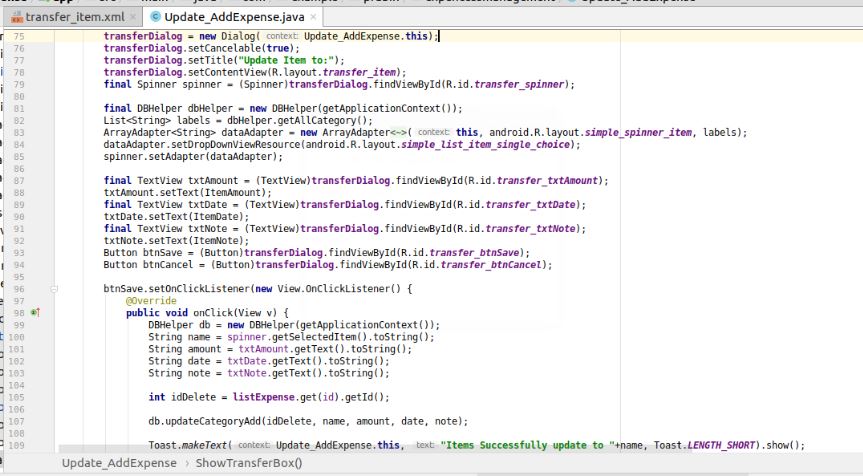
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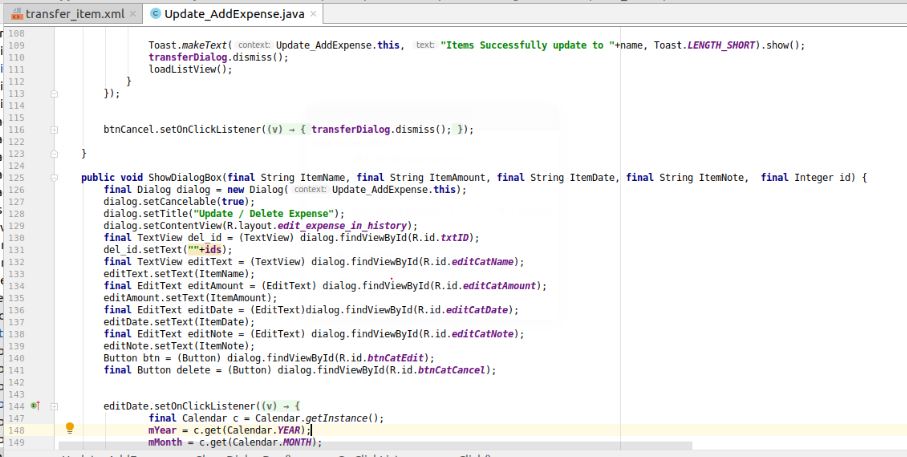
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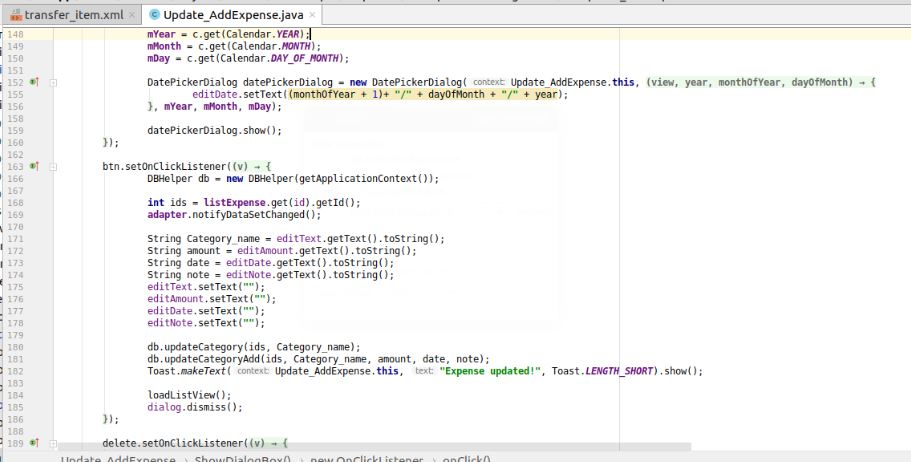
**Code for edit expenses**:

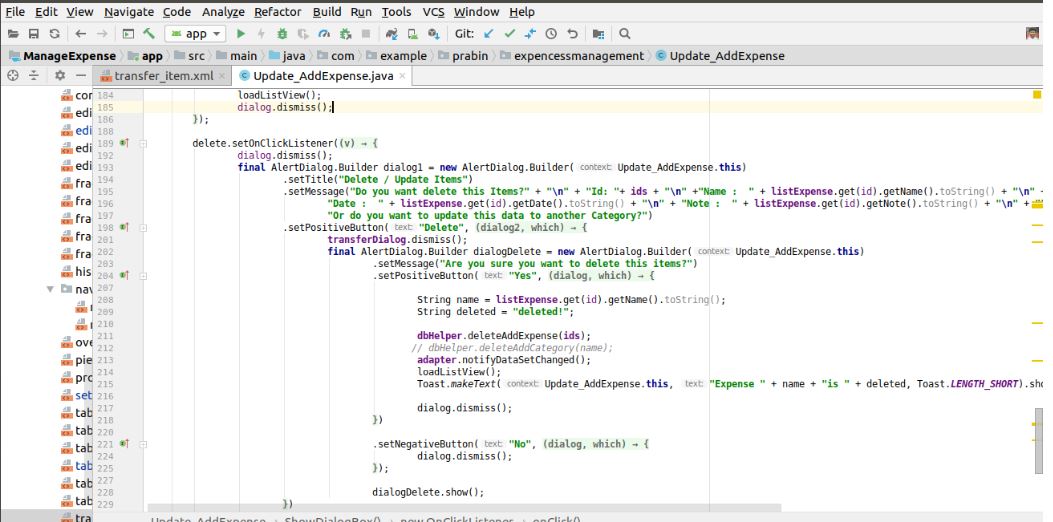






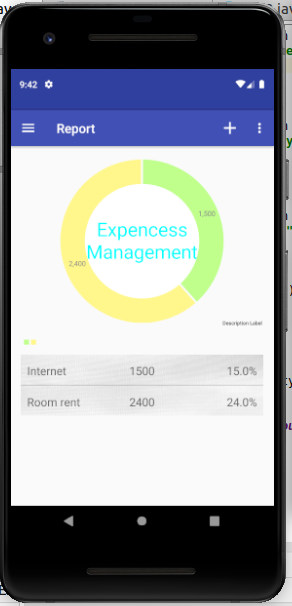




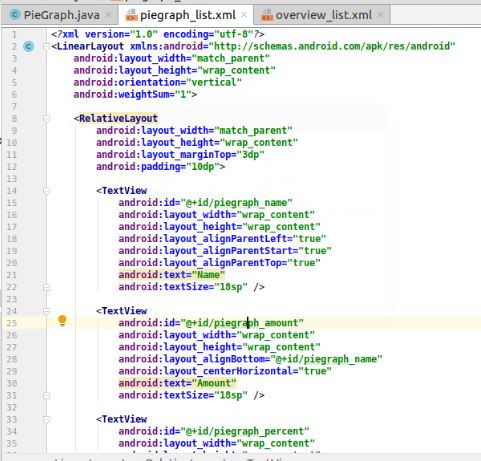
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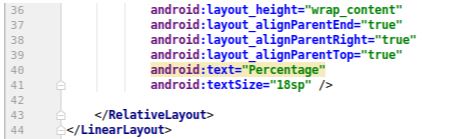
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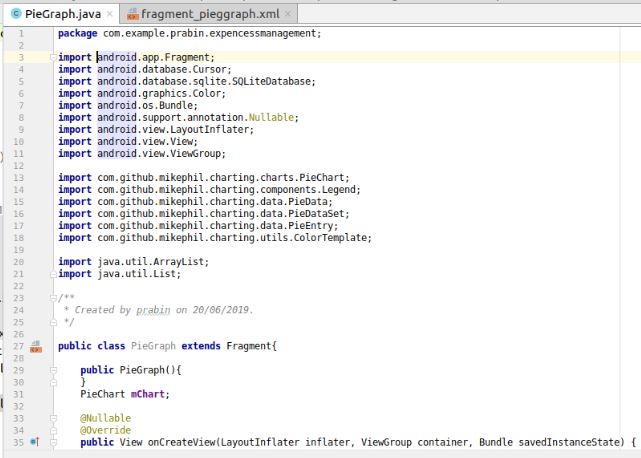
1. **Report form with their code:**



**XML code for report**:





**Code for report:**

