**PRACTICAL # 09**

**OBJECT:**

Data Storage using SharedPreferences

**THEORY:**

Android allows data persistence in applications for tasks such as saving user settings.

**Local Data Storage:**

Applications can store data using different techniques depending on the size of data, its structure, its lifetime, and whether it needs to be shared with other programs.

Simple methods to keep local data: the preferences API (Shared Preferences), and flash memory files.

**SharedPreferences:**

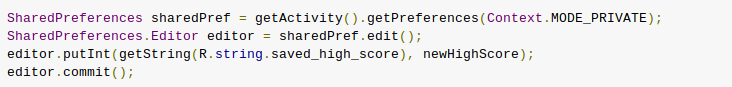
The SharedPreferences class provides a general framework to save and retrieve persistent key-value pairs of primitive data types. You can use SharedPreferences to save any primitive data: boolean, float, int, long, and strings. This data will persist across user sessions (even if your application is killed).

To use sharePreferences, get a handle to a SharedPreferences.

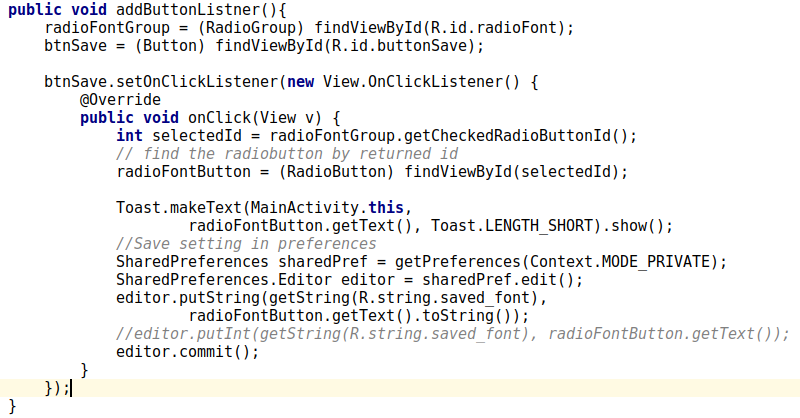
A SharedPreferences object can be accessed using one of two methods:

getSharedPreferences() - Use it when the data you want to save/retrieve can be used from different activities in the app.

getPreferences() - Use it if you need only one preferences file for your Activity. That is, if the preferences will only be used in one Activity, you can use getPreferences.



Example : Setting preferences



The code above shows setting preferences.

**Writing Values:**

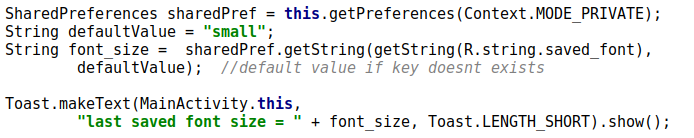
Call edit() to get a SharedPreferences.Editor.

Add values with methods such as putBoolean() and putString().

Commit the new values with commit()

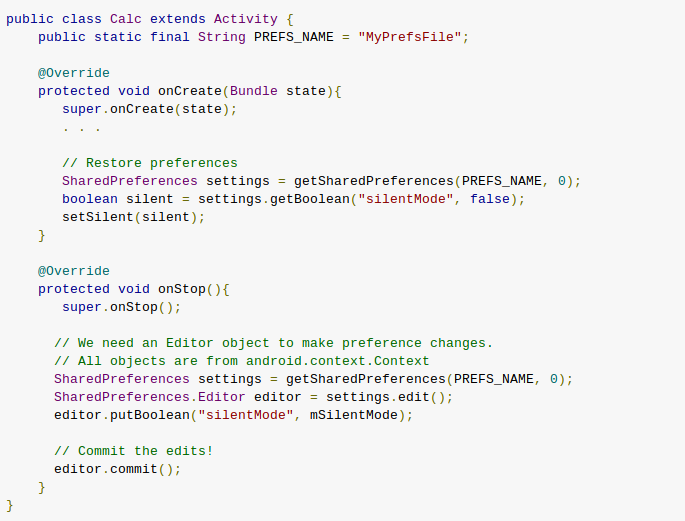
To read values, use SharedPreferences methods such as getBoolean() and getString().

**Example – Getting preferences**



The code above gets the value of previously set preference. The value is obtained using the key.

Example: Saving and retrieving sharedPreferences



The code above shows how to save and retrieve data using SharedPreferences.

**SharedPreferences Storage Location:**

- Preferences can be saved in res/xml/preferences.xml file

- The default preferences are at:

//data/data/YOUR\_PACKAGE\_NAME/shared\_prefs/YOUR\_PACKAGE\_NAME\_preferences.xml

**ACTIVITIES**

**Activity 1**

Create a android application that saves font and color settings for the text in the application.

**REVIEW QUESTIONS**

1. What is the main usage of sharedPreferences?
2. How long does sharedPreferences data persists?
3. How do you get handle to sharedPreferences?
4. Can sharePreferences be used to retrieve data from different activities in same application?