

Figures to be drawn on the blank side of the page

9. Develop a program to implement List View, Grid View, Image View and Scroll View.

A View occupies a rectangular area on the screen and is responsible for drawing and event handling. View is the base class for widgets, which are used to create interactive UI components (buttons, text fields, etc.). The View Group subclass is the base class for layouts, which are invisible containers that hold other Views (or other View Groups) and define their layout properties.

- *wrap_content* tells the view to size itself to the dimensions required by its content.
- *match_parent* tells the view to become as big as its parent view group will allow.

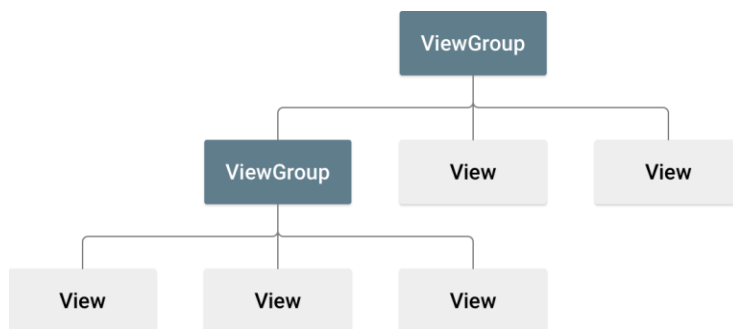
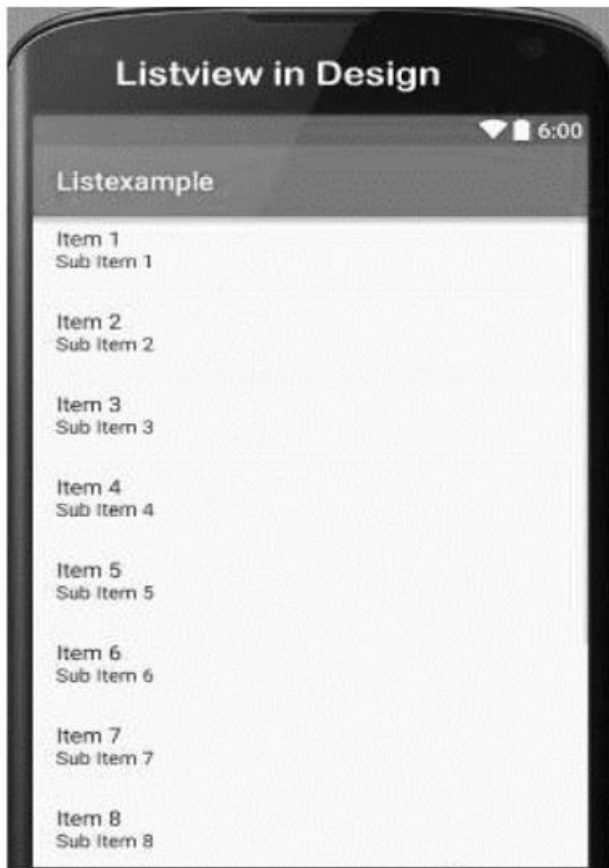


Illustration of a view hierarchy, which defines a UI layout

List View :-

List of scrollable items can be displayed in Android using List View. It helps you to displaying the data in the form of a scrollable list. Users can then select any list item by clicking on it. List View is default scrollable so we do not need to use scroll View or anything else with List View.

List View is widely used in android applications. A very common example of List View is your phone contact book, where you have a list of your contacts displayed in a List View and if you click on it then user information is displayed.

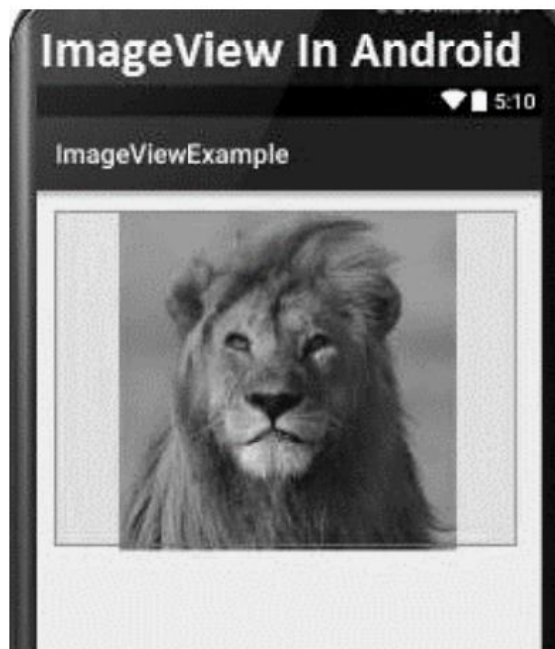


Grid View –

In android Grid View is a view group that displays items in two-dimensional scrolling grid (rows and columns), the grid items are not necessarily predetermined but they are automatically inserted to the layout using a List Adapter. Users can then select any grid item by clicking on it. Grid view is default scrollable so we don't need to use Scroll View or anything else with Grid View.



Image View – In Android, Image View class is used to display an image file in application. Image file is easy to use but hard to master in Android, because of the various screen sizes in Android devices. An android is enriched with some of the best UI design widgets that allows us to build good looking and attractive UI based applications.



Scroll View – In Android scroll view can hold only one direct child. This means that, if you have complex layout with more views (Buttons, Text Views or any other view) then you must enclose them inside another standard layout like Table Layout, Relative Layout or Linear Layout. You can specify `layout_width` and `layout_height` to adjust width and height of screen. You can specify height and width in `dp`(density pixel) or `px`(pixel). Then after enclosing them in a standard layout, enclose the whole layout in scroll view to make all the element or views scrollable.

