Figures to be drawn on the blank side of the page.

5. Develop a program to implement Button, Image Button and Toggle Button.

Buttons -- In Android, Button represents a push button. The android widget Button is subclass of Text View class and Compound Button is the subclass of Button class. A Push button can be clicked, or pressed by the user to perform an action. There are different types of buttons used in android such as Compound Button, Toggle Button, Radio Button. On a button we can perform different actions or events like click event, pressed event, touch event etc. Android buttons are GUI components which are sensible to taps (clicks) by the user. When the user taps/clicks on button in an Android app, the app can respond to the click/tap. These buttons can be divided into two categories: the first is Buttons with text on, and second is buttons with an image on.
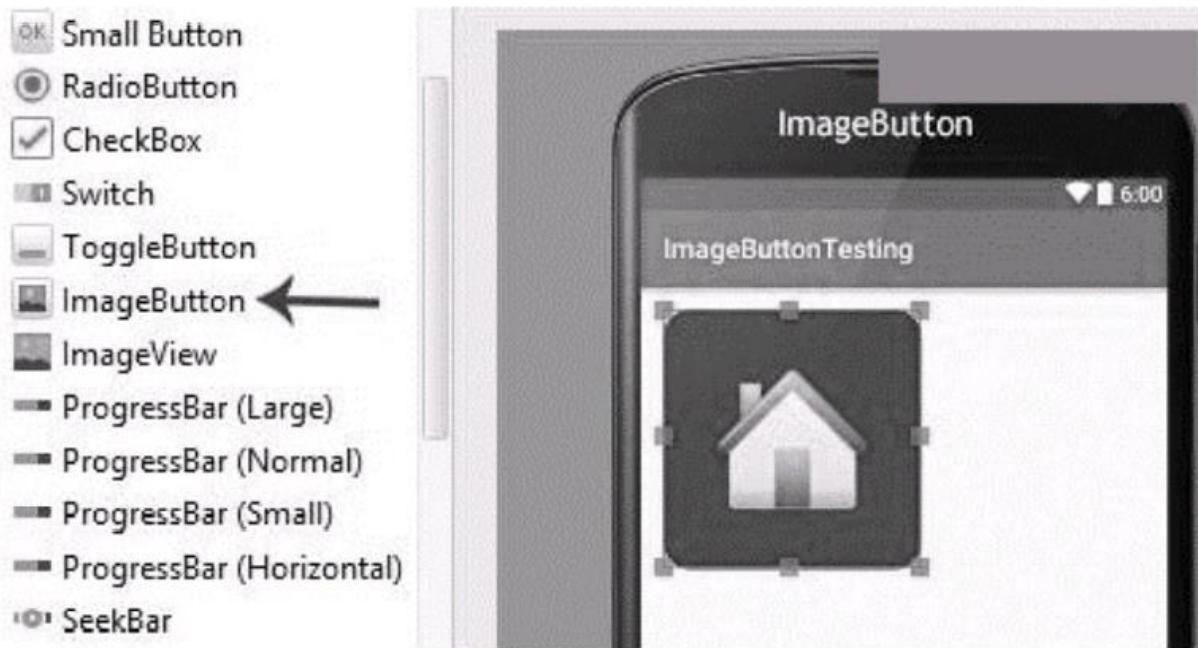

Android Button Control Attributes

Attribute	Description
android:id	It is used to uniquely identify the control
android:gravity	It is used to specify how to align the text like left, right, center, top, etc.
android:text	It is used to set the text.
android:textColor	It is used to change the color of text.
android:textSize	It is used to specify the size of the text.
android:textStyle	It is used to change the style (bold, italic, bolditalic) of text.
android:background	It is used to set the background color for button control.
android:padding	It is used to set the padding from left, right, top and bottom.
android:drawableBottom	It's drawable to be drawn to the below of text.
android:drawableRight	It's drawable to be drawn to the right of text.
android:drawableLeft	It's drawable to be drawn to the left of the text.

Types of buttons– Buttons can be divided into two categories the first is Buttons with text on, and second is buttons with an image on.

Image Button – A button with images on can contain both an image and a text. Android buttons with images on are also called Image Button. In Android, Image Button is used to display a normal button with a custom image in a button. In simple words, Image Button is a button with an image that can be pressed or clicked by the users. By default, it looks like a normal button with the standard button background that changes the color during different button states. An image on the surface of a button is

defined within a xml (i.e. layout) by using src attribute or within java class by using setImageResource() method. We can also set an image or custom drawable in the background of the image button. Image Button has all the properties of a normal button so you can easily perform any event like click or any other event which you can perform on a normal button.

Note: Standard button background image is displayed in the background of button whenever you create an image button. To remove that image, define your own background image in xml by using background attribute or in java class by using setBackground() method.

Toggle Button – allows user to change a setting between two states. You can add a basic toggle button to your layout with the Toggle Button object. If you need to change a button's state yourself, you can use the Compound Button.setChecked() or Compound Button.toggle() method. To detect when the user activates the button or switch, create a Compound Button.OnCheckedChangeListener object and assign it to the button by calling setOnCheckedChangeListener().

It is beneficial if user have to change the setting between two states. It can be used to On/Off Sound, WiFi, Bluetooth etc. By default, the android Toggle button will be in OFF(Unchecked) state. We can change the default state of Toggle Button by using android:checked attribute. In case, if we want to change the state of Toggle Button to ON(Checked), then we need to set android:checked = "true" in XML layout file.