Example 2 B:

Develop an application that uses Event Listeners

Event Listeners

In android, Event Listener is an interface in the View class that contains a single call-back method. These methods will be called by the Android framework when the View which is registered with the listener is triggered by user interaction with the item in UI.

There are three types of event listeners there in android

- View Event Listeners
- EditText Common Listeners
- Input View Listeners

View Event Listeners:

Any View (Button, TextView, etc) has many event listeners that can be attached using the setOnEvent pattern which involves passing a class that implements a particular event interface. The listeners available to any View include:

- **setOnClickListener** - Callback when the view is clicked.
- **setOnDragListener** - Callback when the view is dragged.
- **setOnCheckedChangeListener** - Callback when the view changes checked option.
- **setOnGenericMotionListener** - Callback for arbitrary gestures.
- **setOnHoverListener** - Callback for hovering over the view.
- **setOnKeyListener** - Callback for pressing a hardware key when view has focus.
- **setOnLongClickListener** - Callback for pressing and holding a view.
- **setOnTouchListener** - Callback for touching down or up on a view.

EditText Common Listeners:

In addition to the listeners described above, there are a few other common listeners for input fields in particular.

- **addTextChangedListener** - Fires each time the text in the field is being changed.
- **setOnEditorActionListener** - Fires when an "action" button on the soft keyboard is pressed.

Input View Listeners:

Similarly to EditText, many common input views have listeners of their own including **NumberPicker** has **setOnValueChangedListener** and **SeekBar** has **setOnSeekBarChangeListener** which allow us to listen for changes