



RelativeLayout

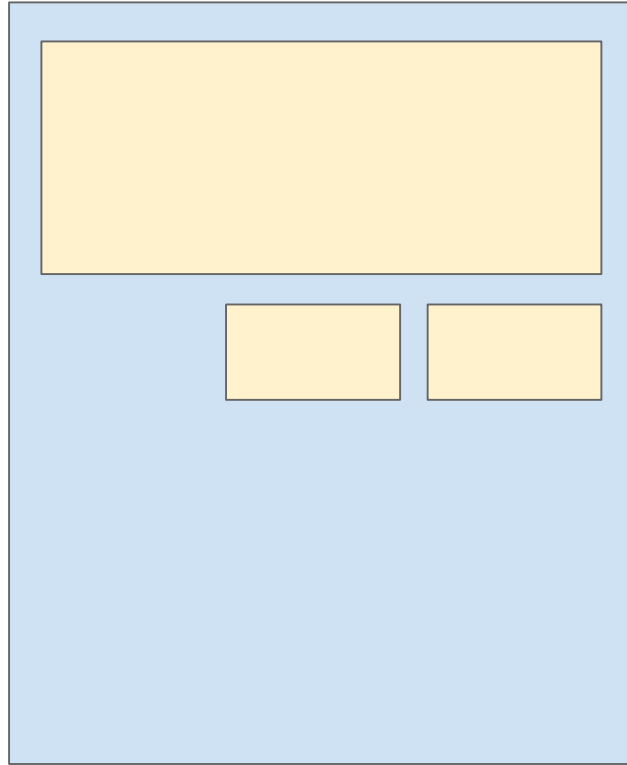
Layout
Fundamentals

Overview

- What is RelativeLayout?
- Relative Positioning
- Relative Alignment
- Missing Views

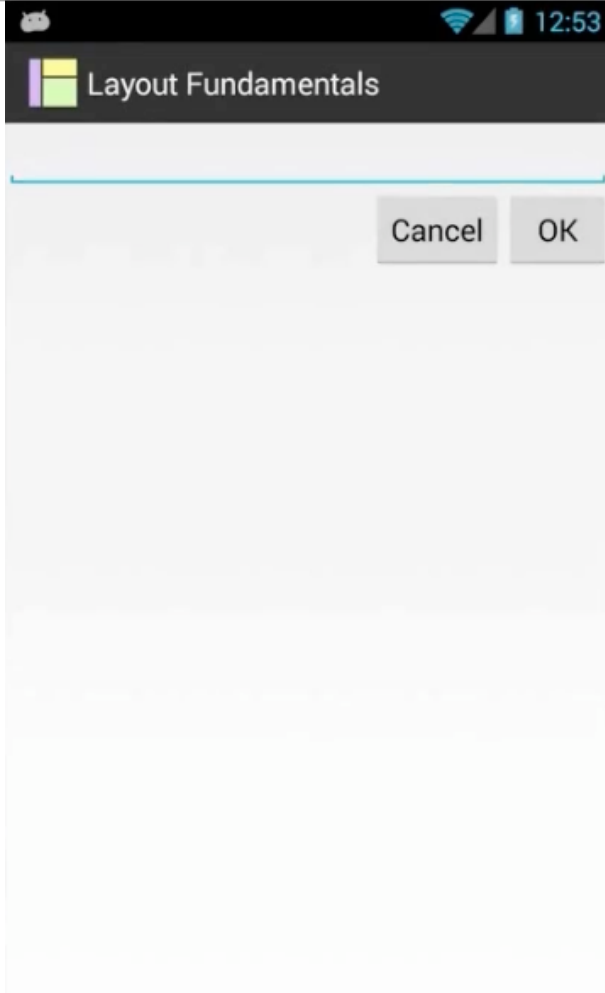


RelativeLayout



Relative Positioning





XML Attributes	
Attribute Name	Description
<code>android:layout_above</code>	Positions the bottom edge of this view above the given anchor view ID.
<code>android:layout_alignBaseline</code>	Positions the baseline of this view on the baseline of the given anchor view ID.
<code>android:layout_alignBottom</code>	Makes the bottom edge of this view match the bottom edge of the given anchor view ID.
<code>android:layout_alignEnd</code>	Makes the end edge of this view match the end edge of the given anchor view ID.
<code>android:layout_alignLeft</code>	Makes the left edge of this view match the left edge of the given anchor view ID.
<code>android:layout_alignParentBottom</code>	If true, makes the bottom edge of this view match the bottom edge of the parent.
<code>android:layout_alignParentEnd</code>	If true, makes the end edge of this view match the end edge of the parent.
<code>android:layout_alignParentLeft</code>	If true, makes the left edge of this view match the left edge of the parent.
<code>android:layout_alignParentRight</code>	If true, makes the right edge of this view match the right edge of the parent.
<code>android:layout_alignParentStart</code>	If true, makes the start edge of this view match the start edge of the parent.
<code>android:layout_alignParentTop</code>	If true, makes the top edge of this view match the top edge of the parent.
<code>android:layout_alignRight</code>	Makes the right edge of this view match the right edge of the given anchor view ID.
<code>android:layout_alignStart</code>	Makes the start edge of this view match the start edge of the given anchor view ID.
<code>android:layout_alignTop</code>	Makes the top edge of this view match the top edge of the given anchor view ID.
<code>android:layout_alignWithParentIfMissing</code>	If set to true, the parent will be used as the anchor when the anchor cannot be found for <code>layout_toLeftOf</code> , <code>layout_toRightOf</code> , etc.
<code>android:layout_below</code>	Positions the top edge of this view below the given anchor view ID.
<code>android:layout_centerHorizontal</code>	If true, centers this child horizontally within its parent.
<code>android:layout_centerInParent</code>	If true, centers this child horizontally and vertically within its parent.
<code>android:layout_centerVertical</code>	If true, centers this child vertically within its parent.
<code>android:layout_toEndOf</code>	Positions the start edge of this view to the end of the given anchor view ID.
<code>android:layout_toLeftOf</code>	Positions the right edge of this view to the left of the given anchor view ID.
<code>android:layout_toRightOf</code>	Positions the left edge of this view to the right of the given anchor view ID.
<code>android:layout_toStartOf</code>	Positions the end edge of this view to the start of the given anchor view ID.



Relative

- Position
- Alignment

To

- Parent
- Sibling



```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
</RelativeLayout>
```




```
<RelativeLayout
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="match_parent">
```

```
    <EditText
```

```
        android:id="@+id/greeting"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content" />
```

```
    <Button
```

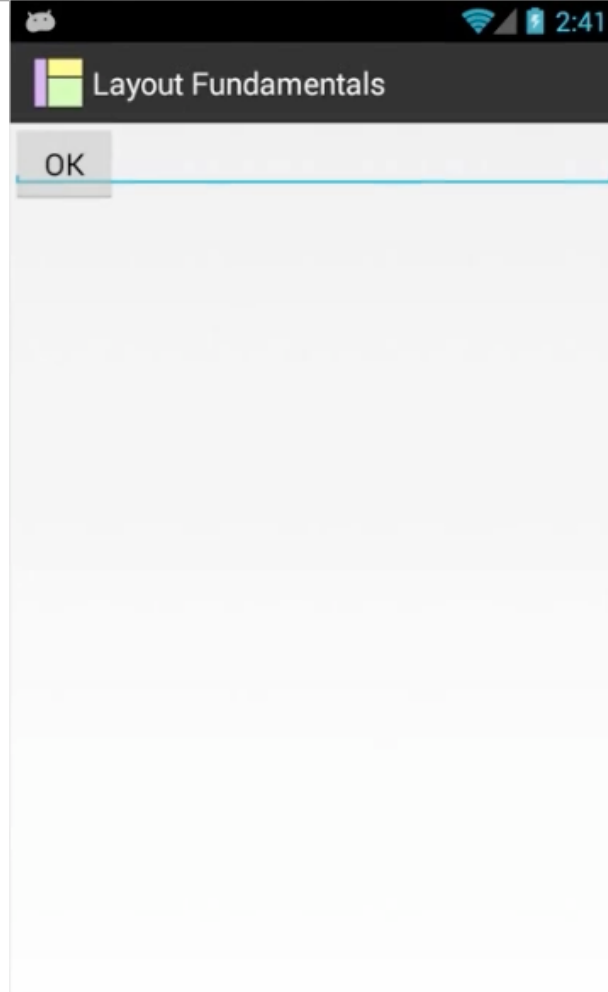
```
        android:id="@+id/btnOk"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:text="@string/ok" />
```

```
</RelativeLayout>
```



```
<RelativeLayout
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="match_parent">
```

```
    <EditText
```

```
        android:id="@+id/greeting"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content" />
```

```
    <Button
```

```
        android:id="@+id/btnOk"
```

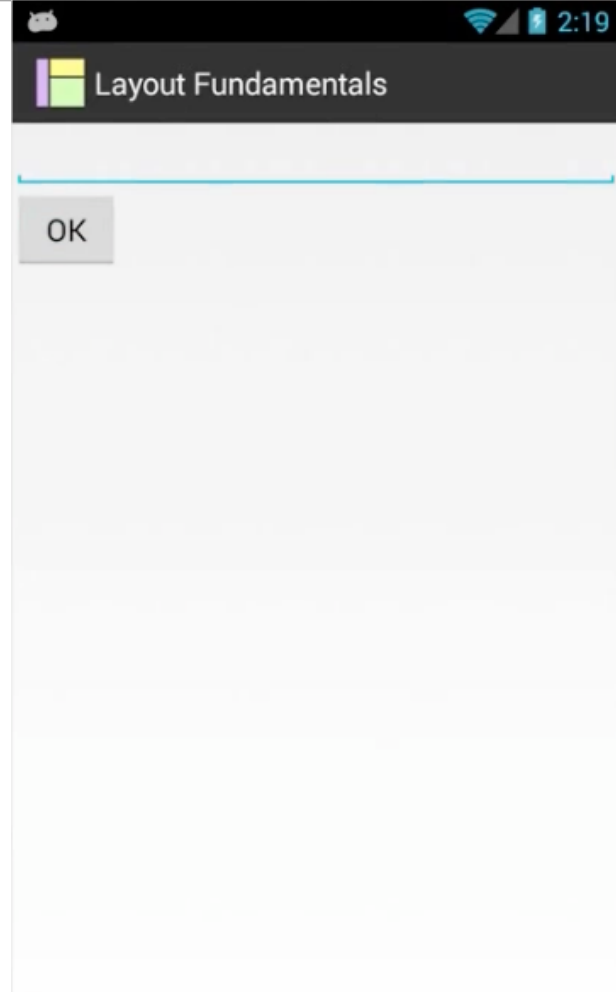
```
        android:layout_below="@id/greeting"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content"
```

```
        android:text="@string/ok" />
```

```
</RelativeLayout>
```



```
<RelativeLayout
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="match_parent">
```

```
    <EditText
```

```
        android:id="@+id/greeting"
```

```
        android:layout_width="match_parent"
```

```
        android:layout_height="wrap_content" />
```

```
    <Button
```

```
        android:id="@+id/btnOk"
```

```
        android:layout_below="@id/greeting"
```

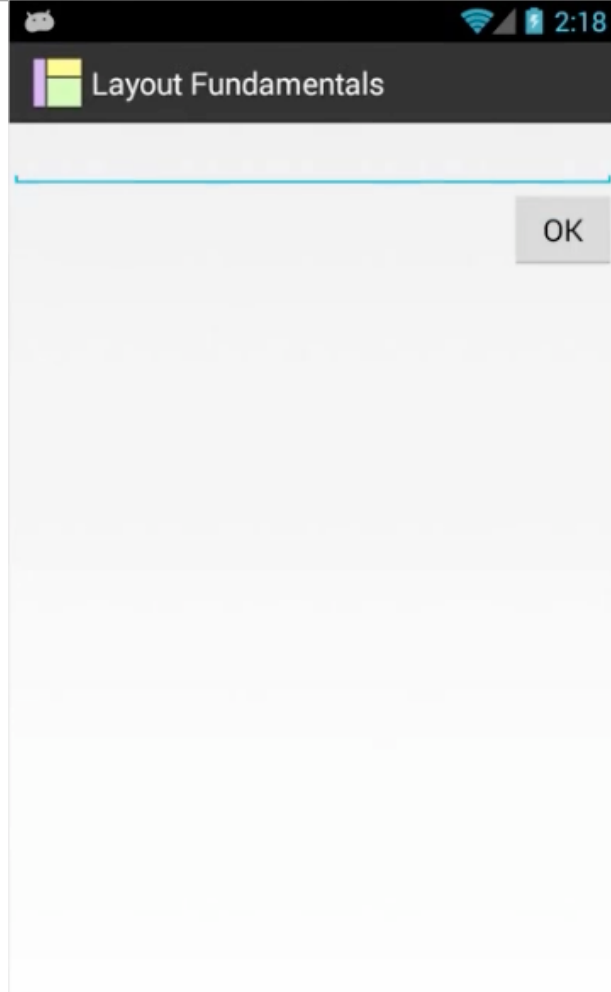
```
        android:layout_alignParentRight="true"
```

```
        android:layout_width="match_parent"
```

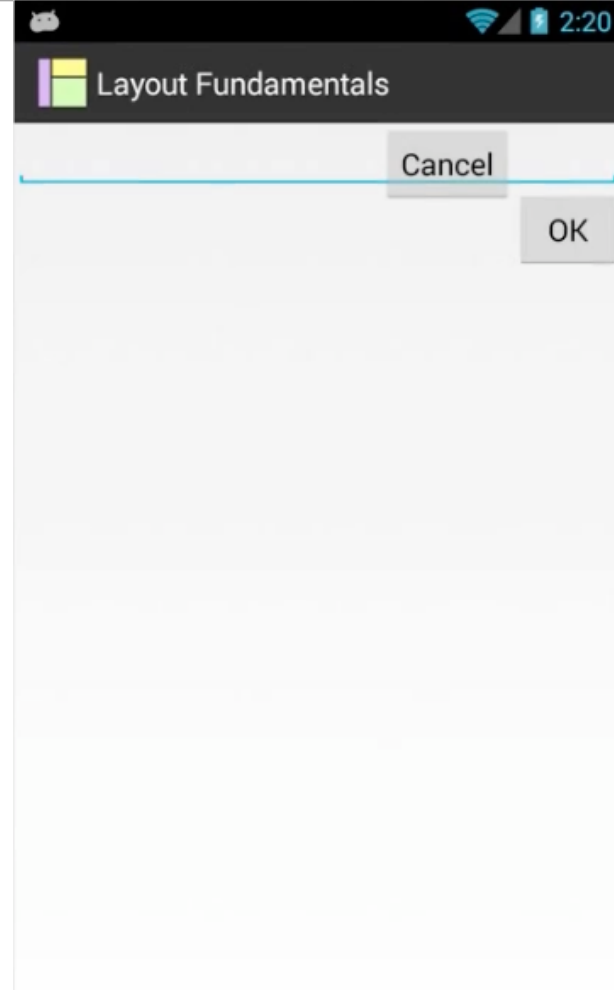
```
        android:layout_height="wrap_content"
```

```
        android:text="@string/ok" />
```

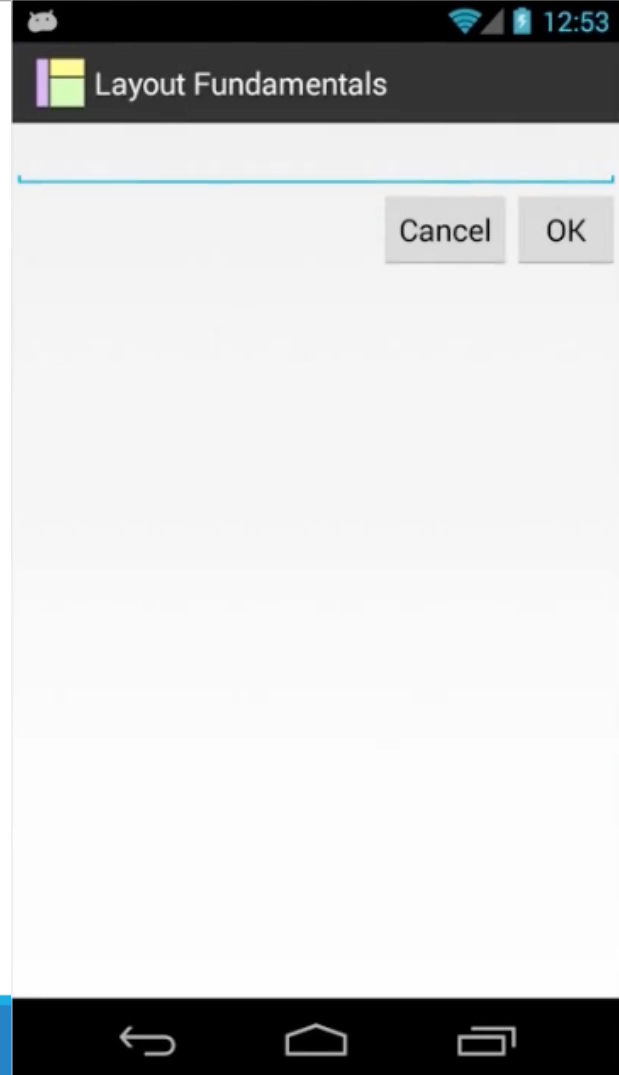
```
</RelativeLayout>
```



```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btnOk"
        android:layout_below="@id/greeting"
        android:layout_alignParentRight="true"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/ok" />
    <Button
        android:layout_toLeftOf="@id/btnOk"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/cancel" />
</RelativeLayout>
```



```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btnOk"
        android:layout_below="@id/greeting"
        android:layout_alignParentRight="true"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/ok" />
    <Button
        android:layout_below="@id/greeting"
        android:layout_toLeftOf="@id/btnOk"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/cancel" />
</RelativeLayout>
```



Relative to Sibling

`android:layout_above`

`android:layout_below`

`android:layout_toLeftOf`

`android:layout_toStartOf`

`android:layout_toRightOf`

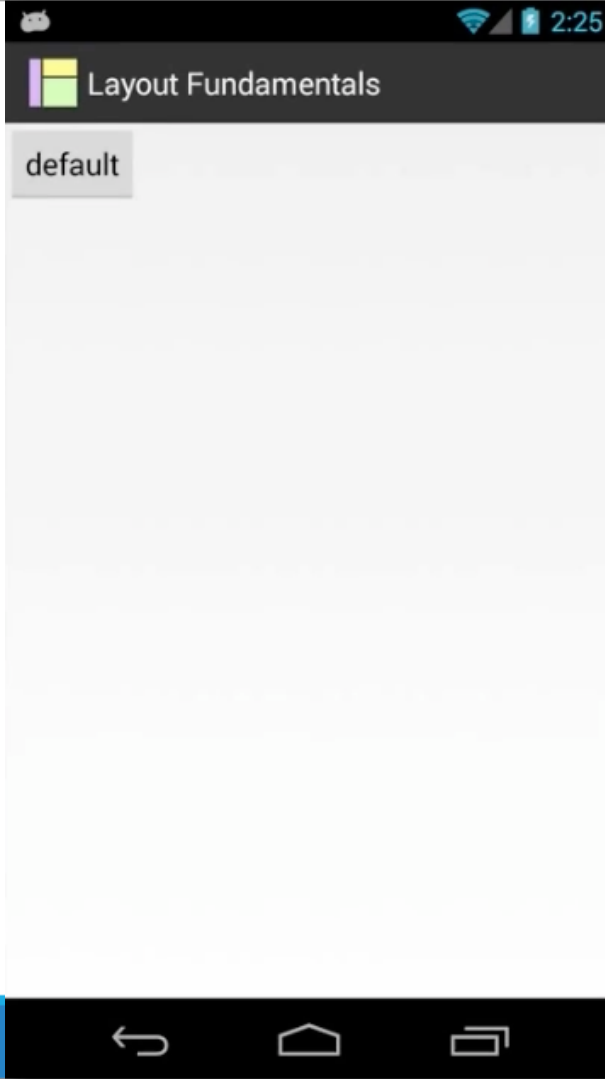
`android:layout_toEndOf`

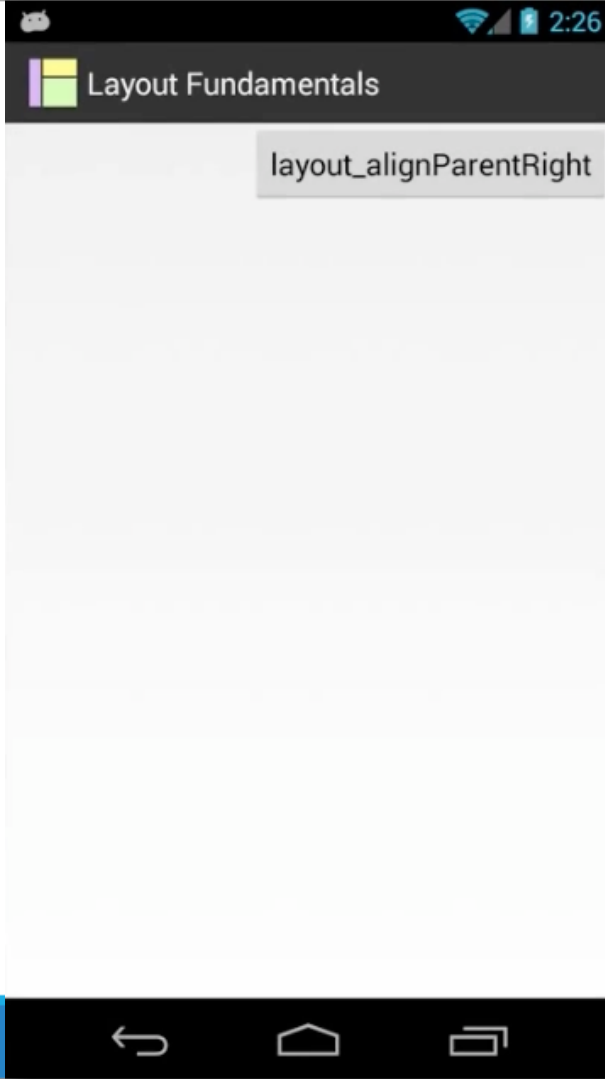


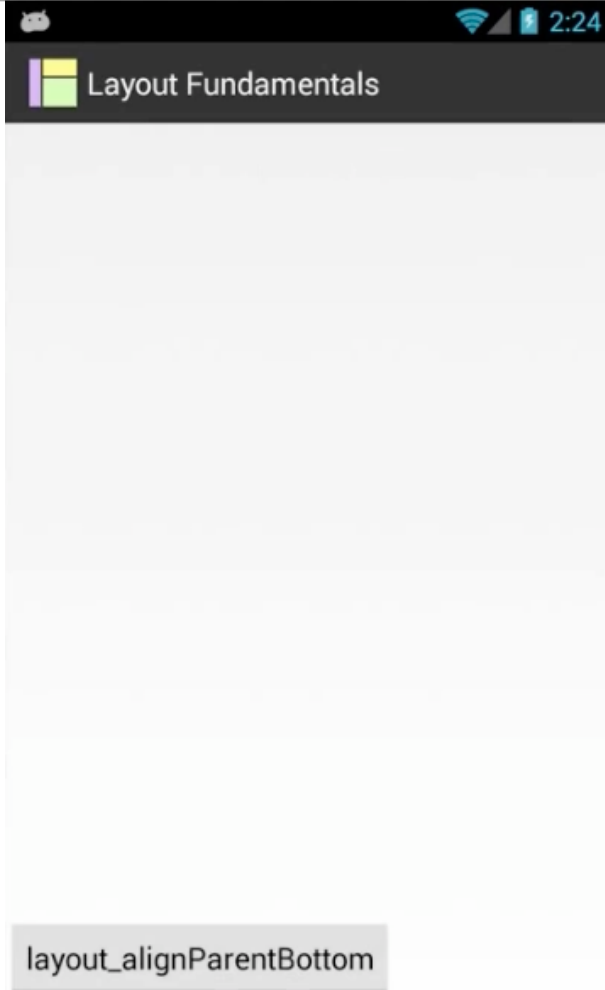
Relative to Parent

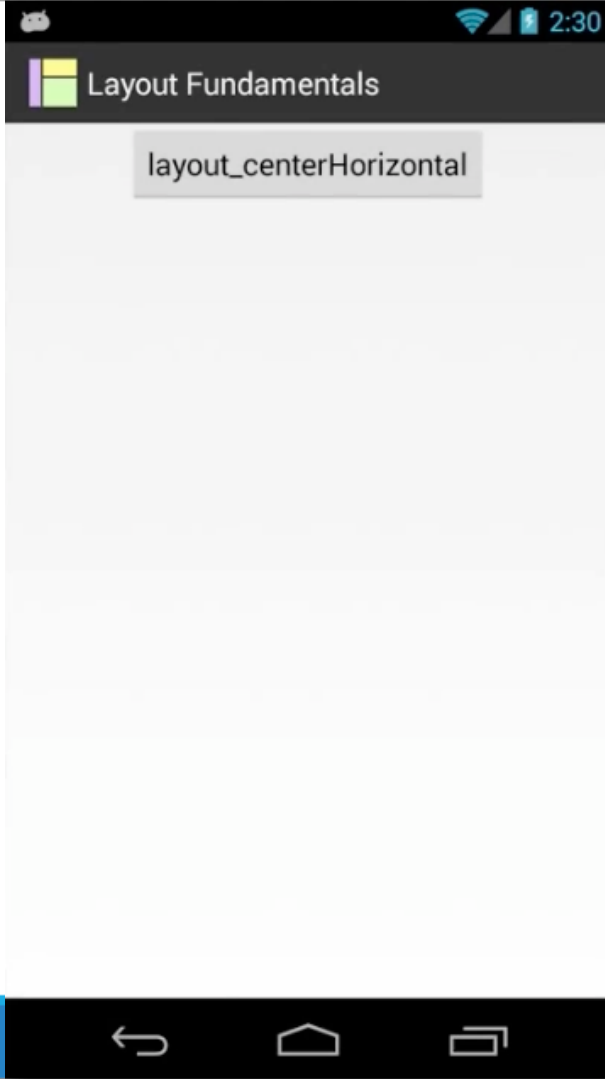
`android:layout_alignParentTop`
`android:layout_alignParentBottom`
`android:layout_alignParentLeft`
`android:layout_alignParentRight`
`android:layout_centerHorizontal`
`android:layout_centerVertical`
`android:layout_centerInParent`

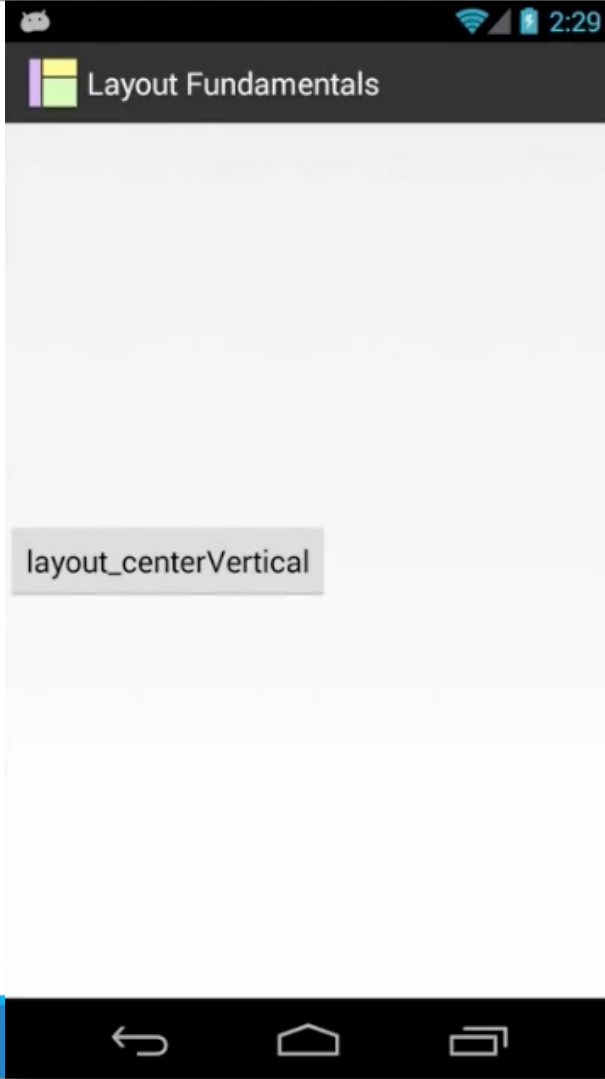












layout_centerInParent

Relative Alignment



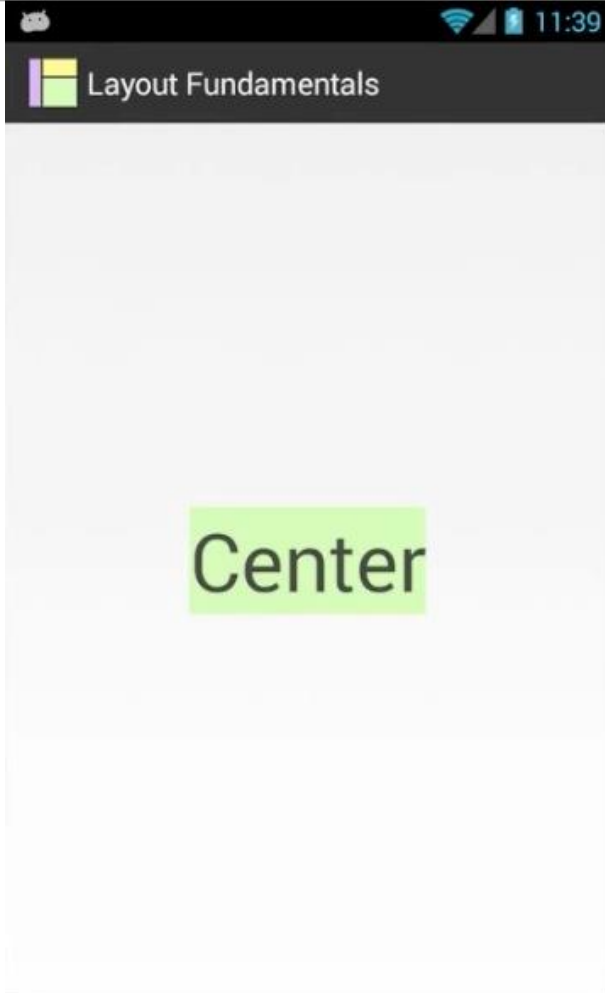
North
Center
East
West
South



Center

```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:id="@+id/center"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerInParent="true"
        android:text="@string/center"
        android:textSize="48sp"
        android:background="#cf9" />
</RelativeLayout>
```

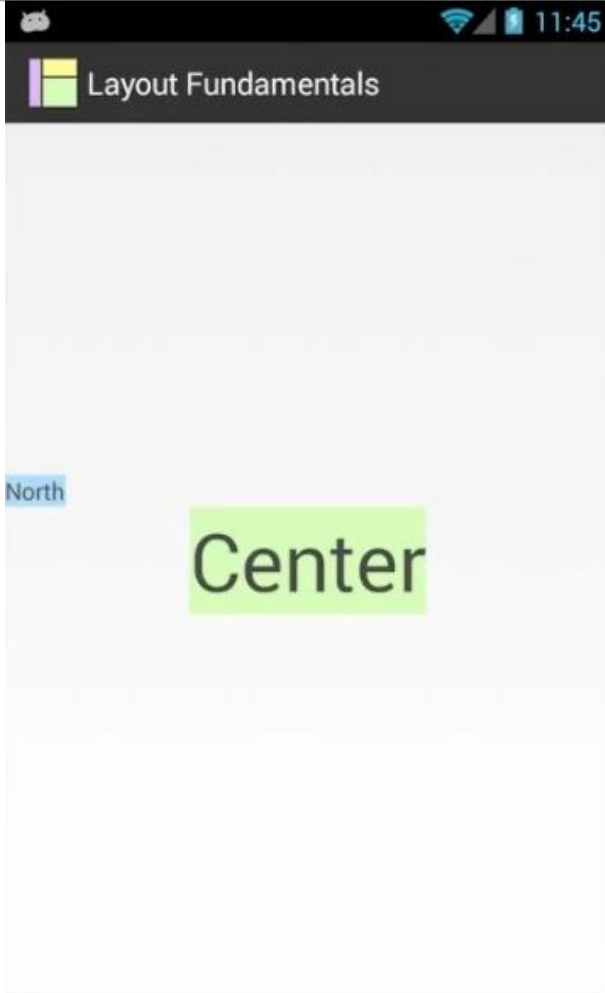




North

```
<RelativeLayout >  
    <TextView android:text="@string/center" />  
    <TextView  
        android:layout_width="wrap_content"  
        android:layout_height="wrap_content"  
        android:layout_above="@id/center"  
        android:text="@string/north"  
        android:background="#9cf" />  
</RelativeLayout>
```

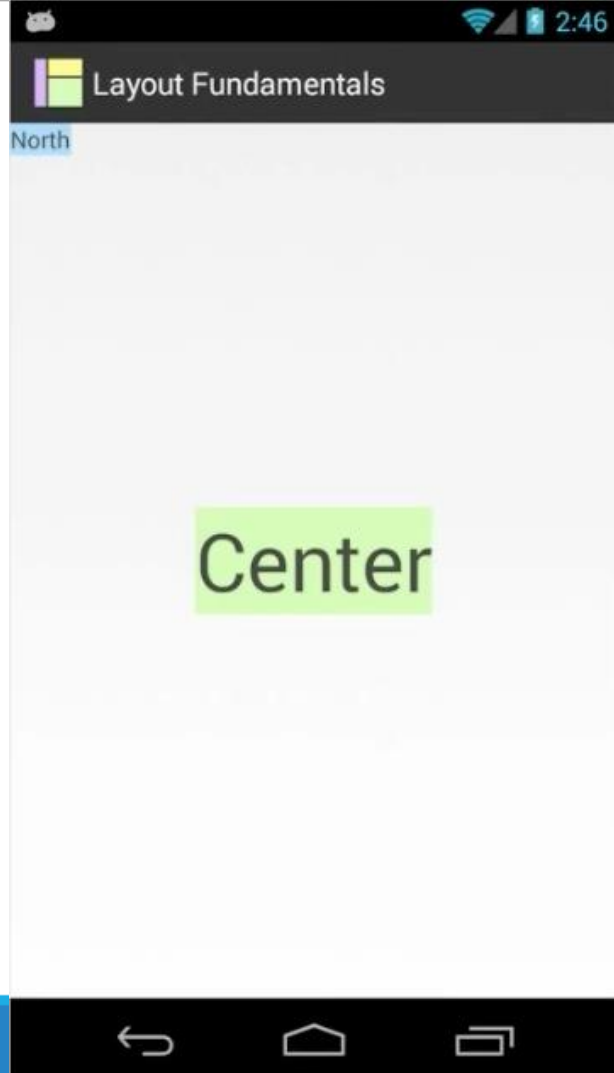




```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/north"
        android:background="#9cf" />
</RelativeLayout>
```

Top

Left

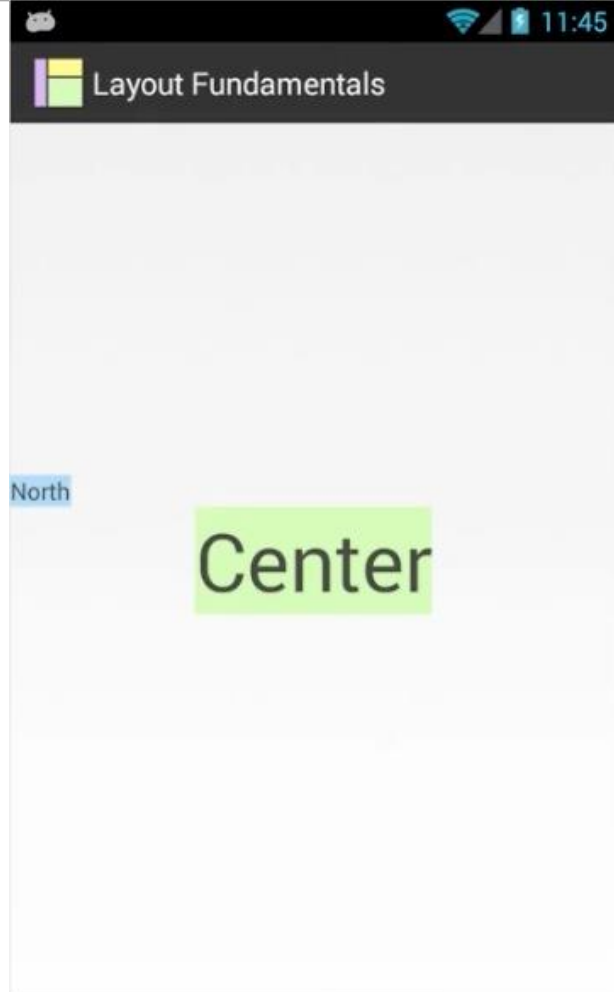


```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_above="@id/center"
        android:text="@string/north"
        android:background="#9cf" />
</RelativeLayout>
```

Top

Left

above
@id/center



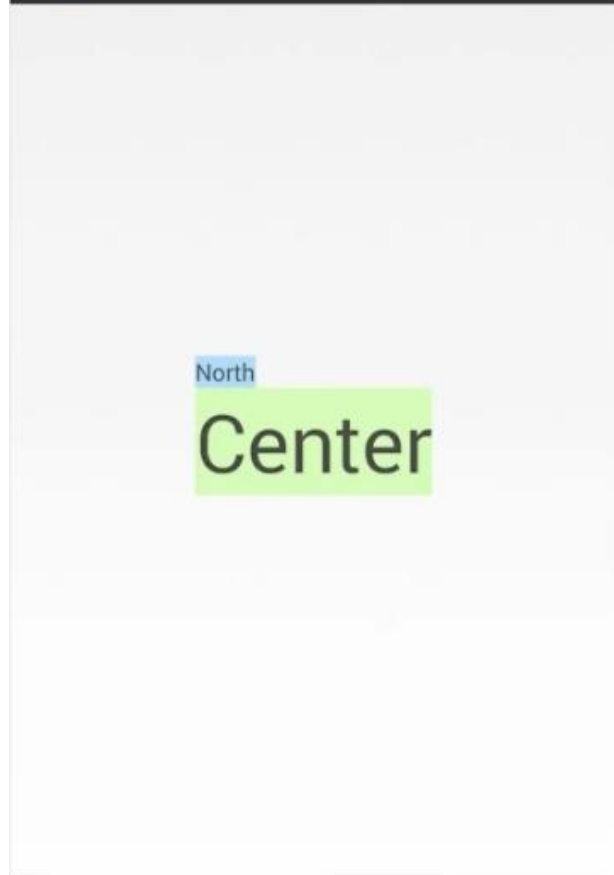
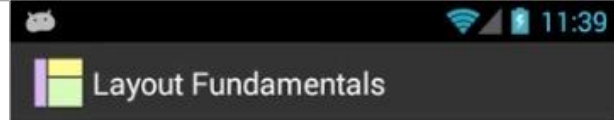
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_above="@id/center"
        android:layout_alignLeft="@id/center"
        android:text="@string/north"
        android:background="#9cf" />
</RelativeLayout>
```

Top

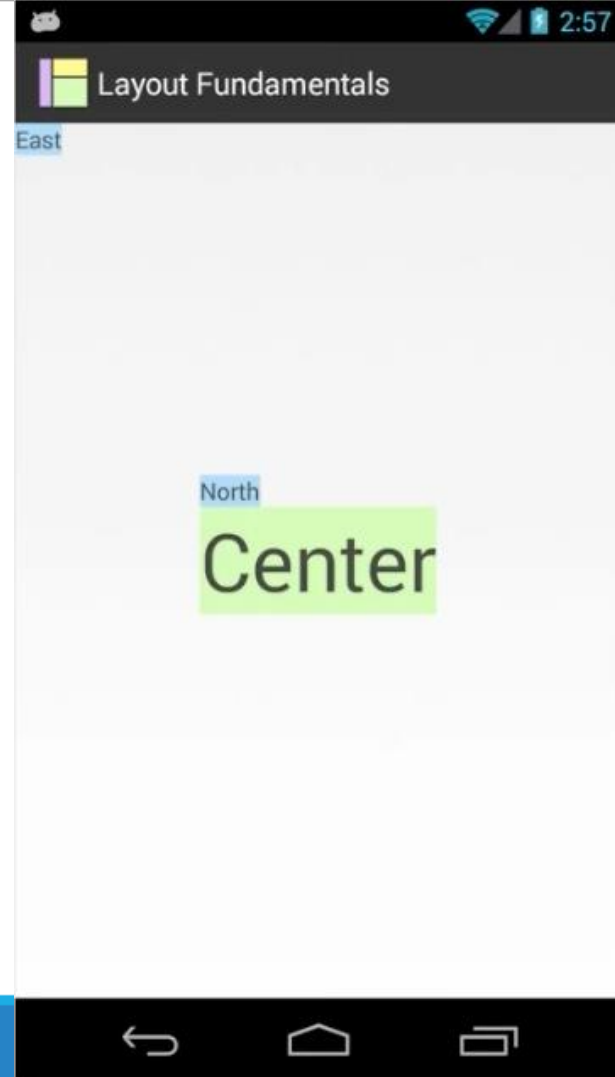
Left

above
@id/center

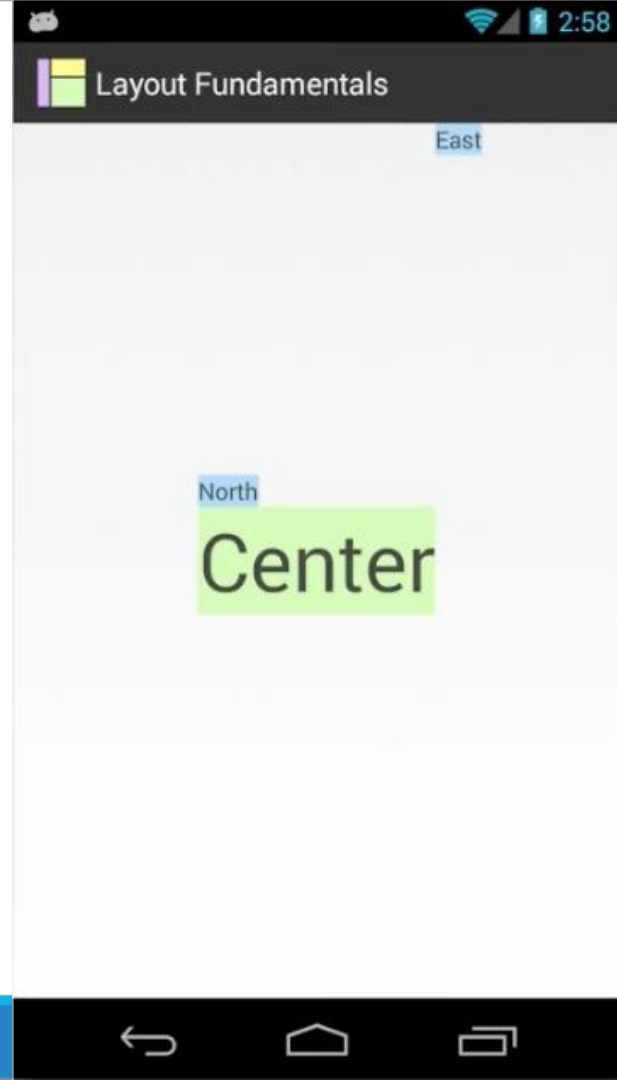
align left edge with
@id/center



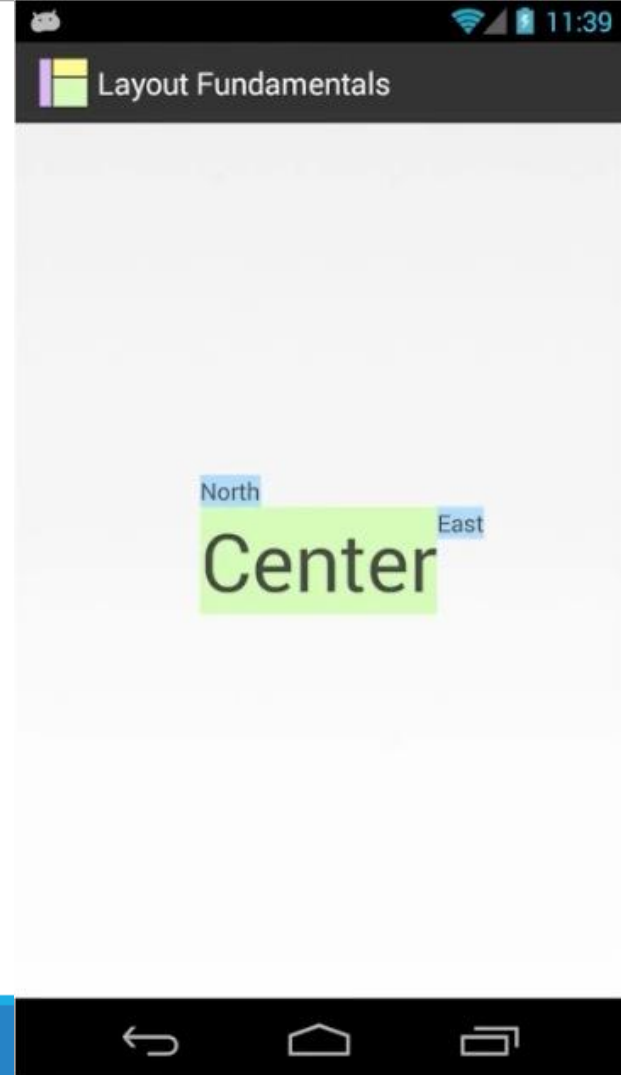
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/east"
        android:background="#9cf" />
</RelativeLayout>
```



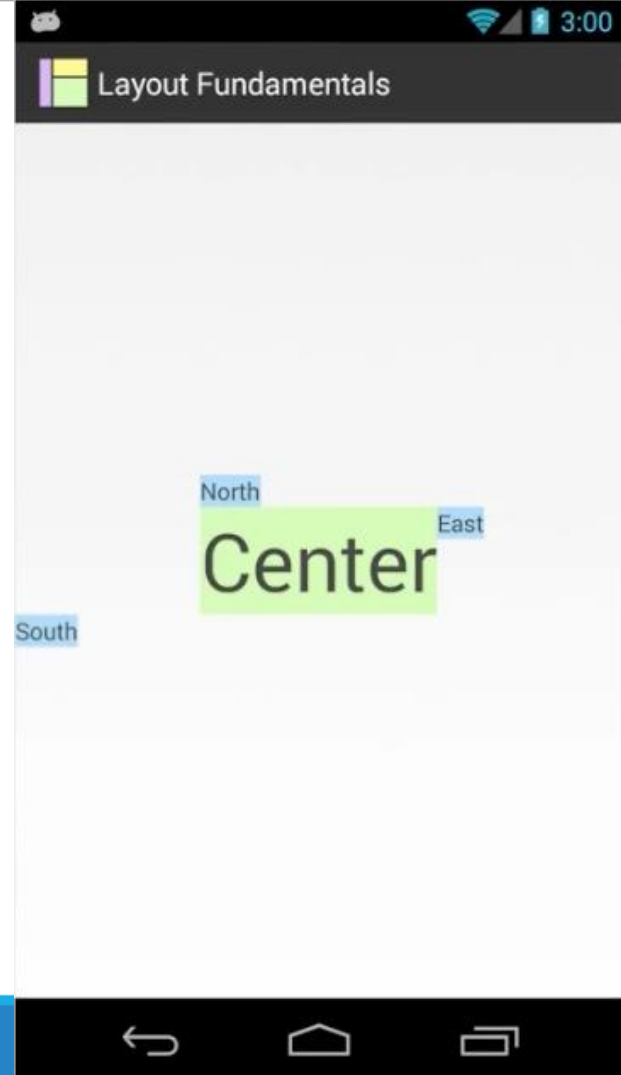
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toRightOf="@id/center"
        android:text="@string/east"
        android:background="#9cf" />
</RelativeLayout>
```



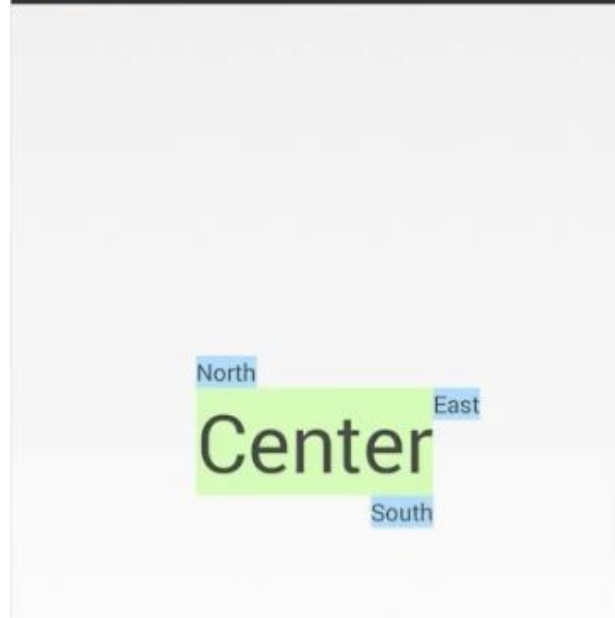
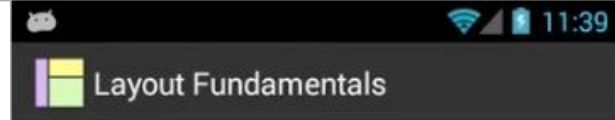

```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toRightOf="@id/center"
        android:layout_alignTop="@id/center"
        android:text="@string/east"
        android:background="#9cf" />
</RelativeLayout>
```



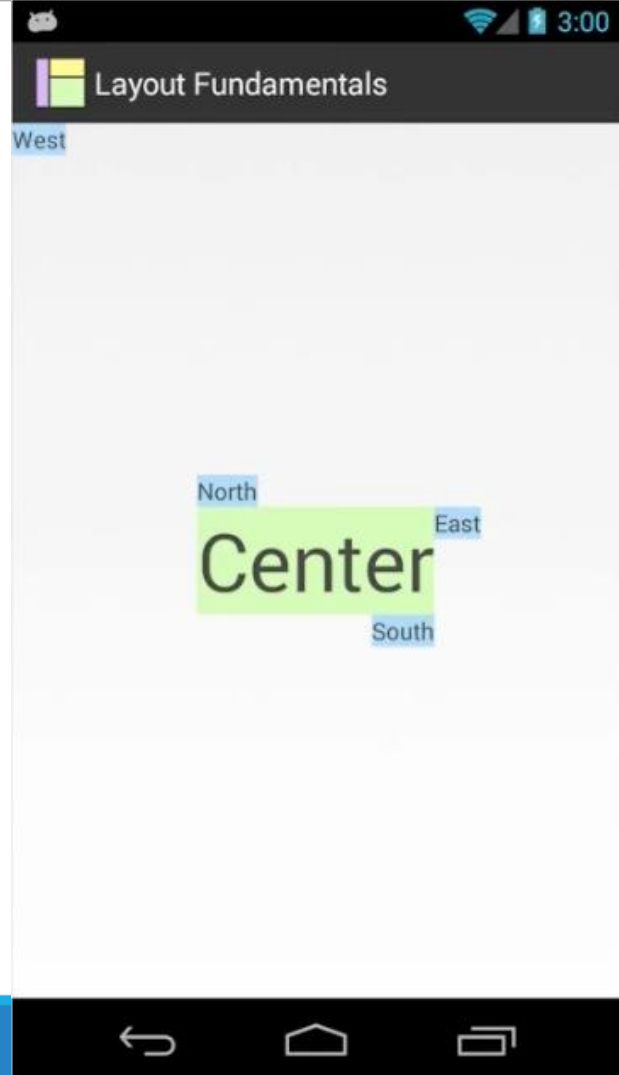
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView android:text="@string/east" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/center"
        android:text="@string/south"
        android:background="#9cf" />
</RelativeLayout>
```



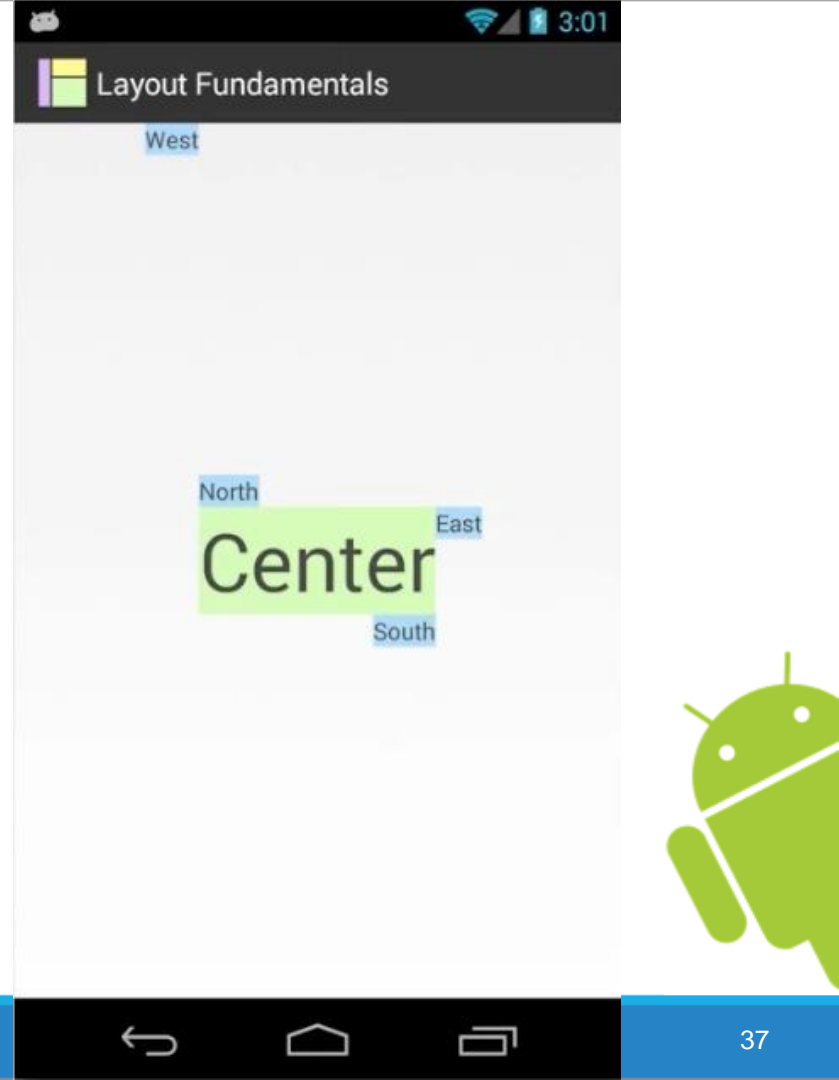
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView android:text="@string/east" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_below="@id/center"
        android:layout_alignRight="@id/center"
        android:text="@string/south"
        android:background="#9cf" />
</RelativeLayout>
```



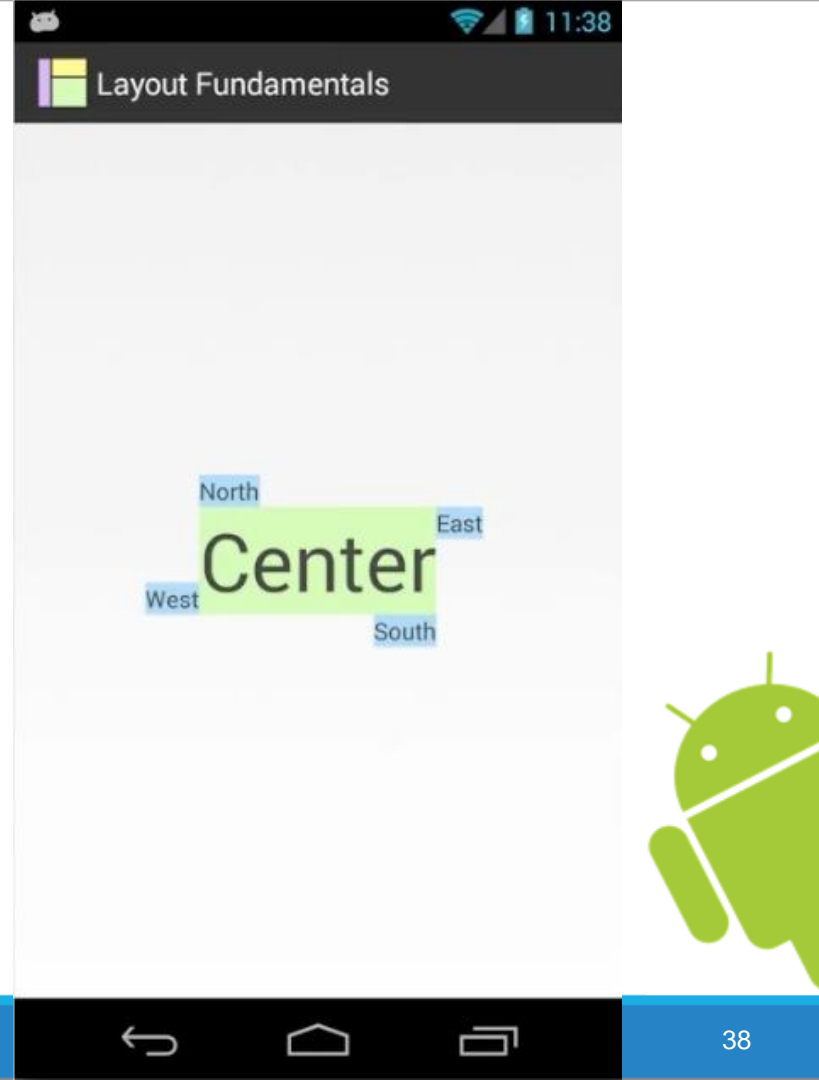
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView android:text="@string/east" />
    <TextView android:text="@string/south" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/west"
        android:background="#9cf" />
</RelativeLayout>
```



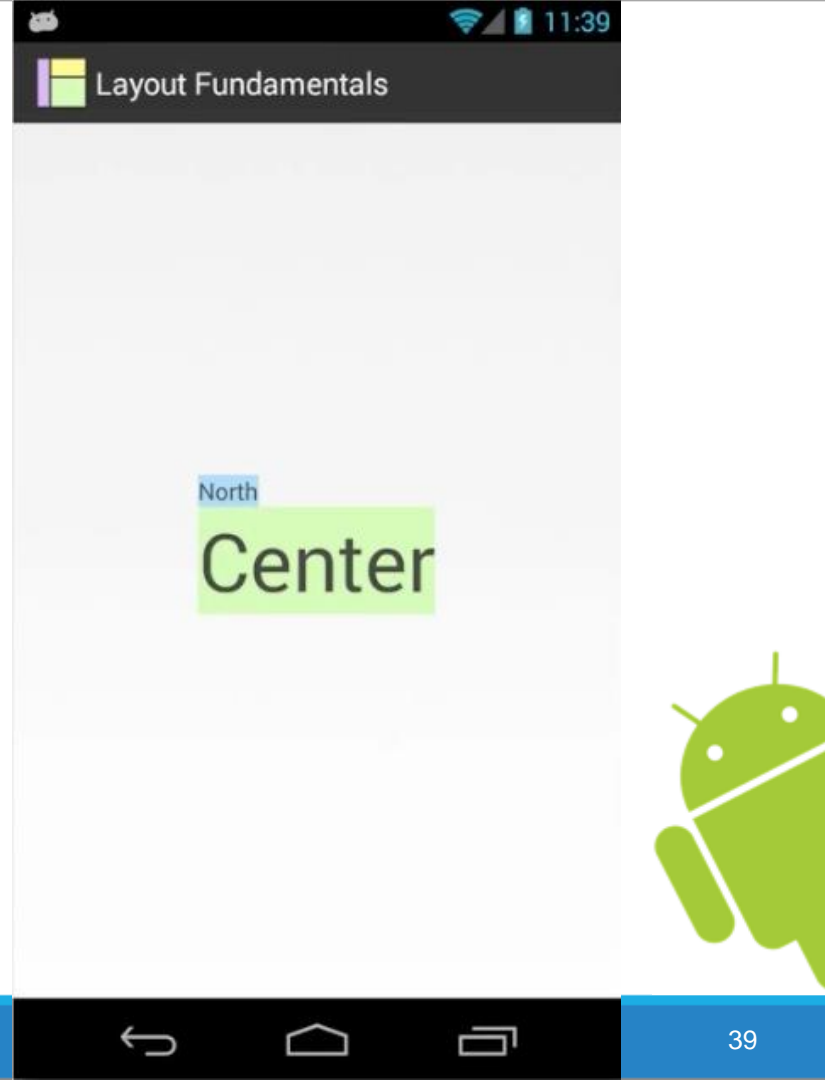
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView android:text="@string/east" />
    <TextView android:text="@string/south" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toLeftOf="@id/center"
        android:text="@string/west"
        android:background="#9cf" />
</RelativeLayout>
```



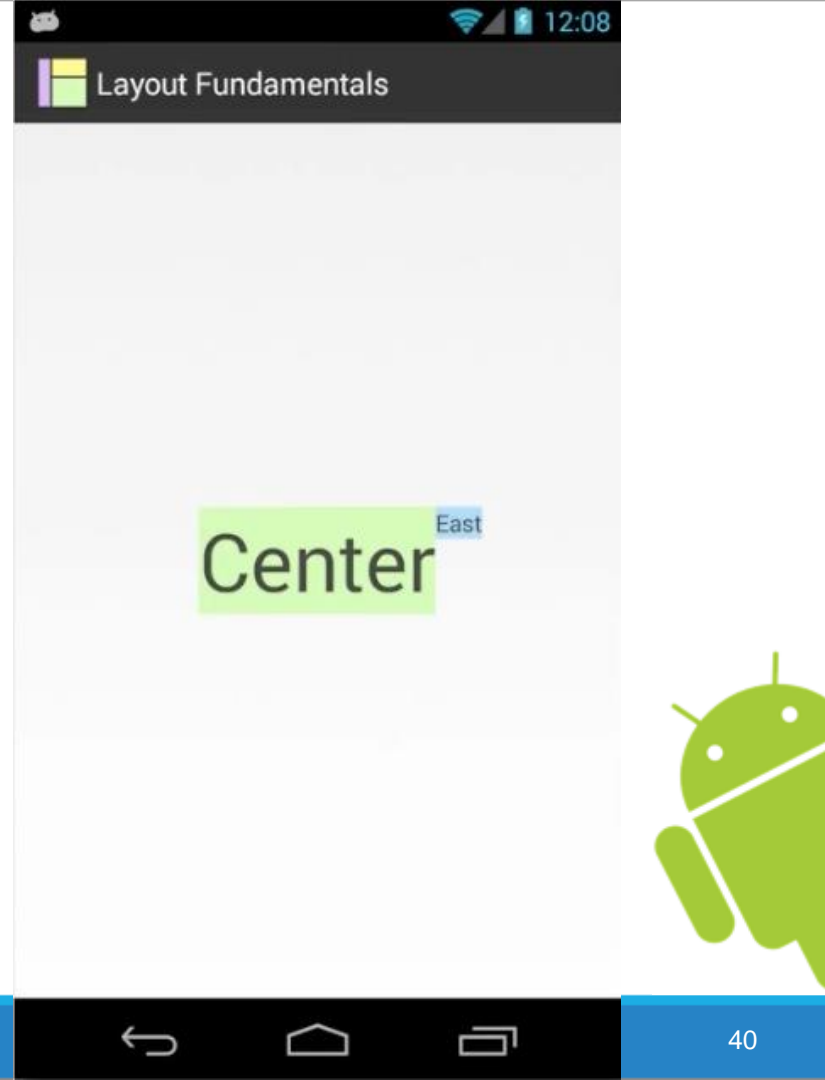
```
<RelativeLayout >
    <TextView android:text="@string/center" />
    <TextView android:text="@string/north" />
    <TextView android:text="@string/east" />
    <TextView android:text="@string/south" />
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_toLeftOf="@id/center"
        android:layout_alignBottom="@id/center"
        android:text="@string/west"
        android:background="#9cf" />
</RelativeLayout>
```



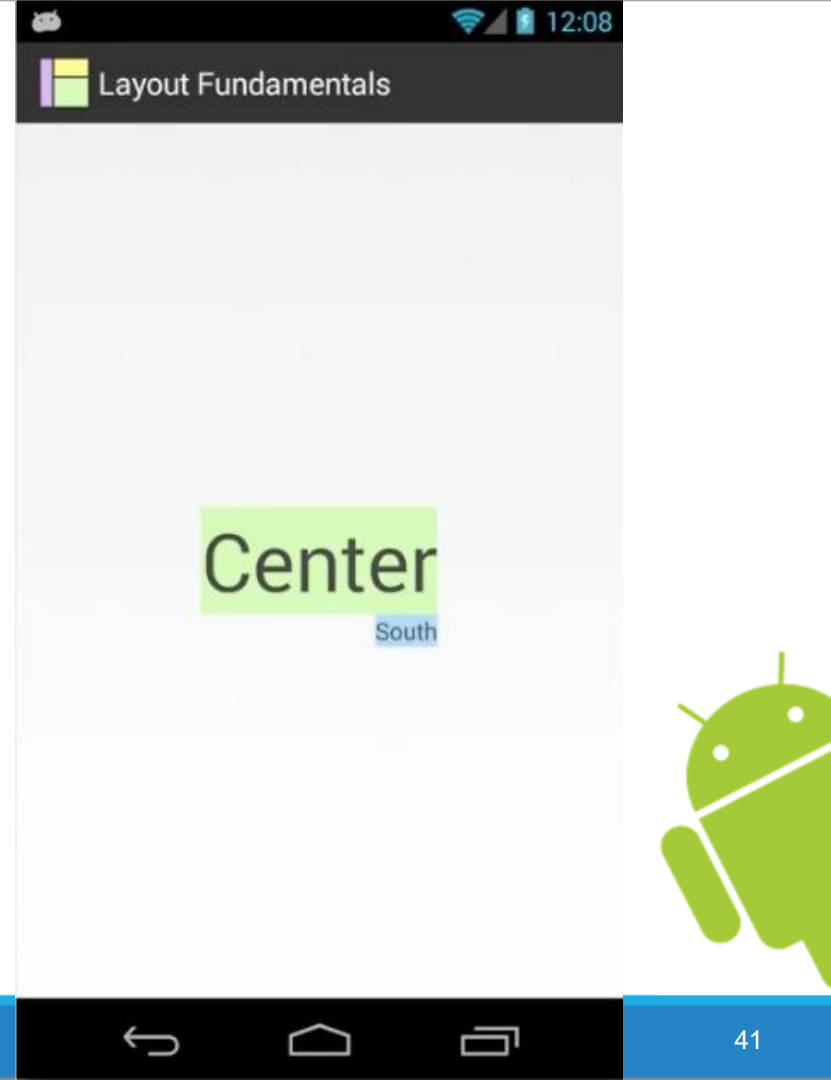
`android:layout_alignLeft`



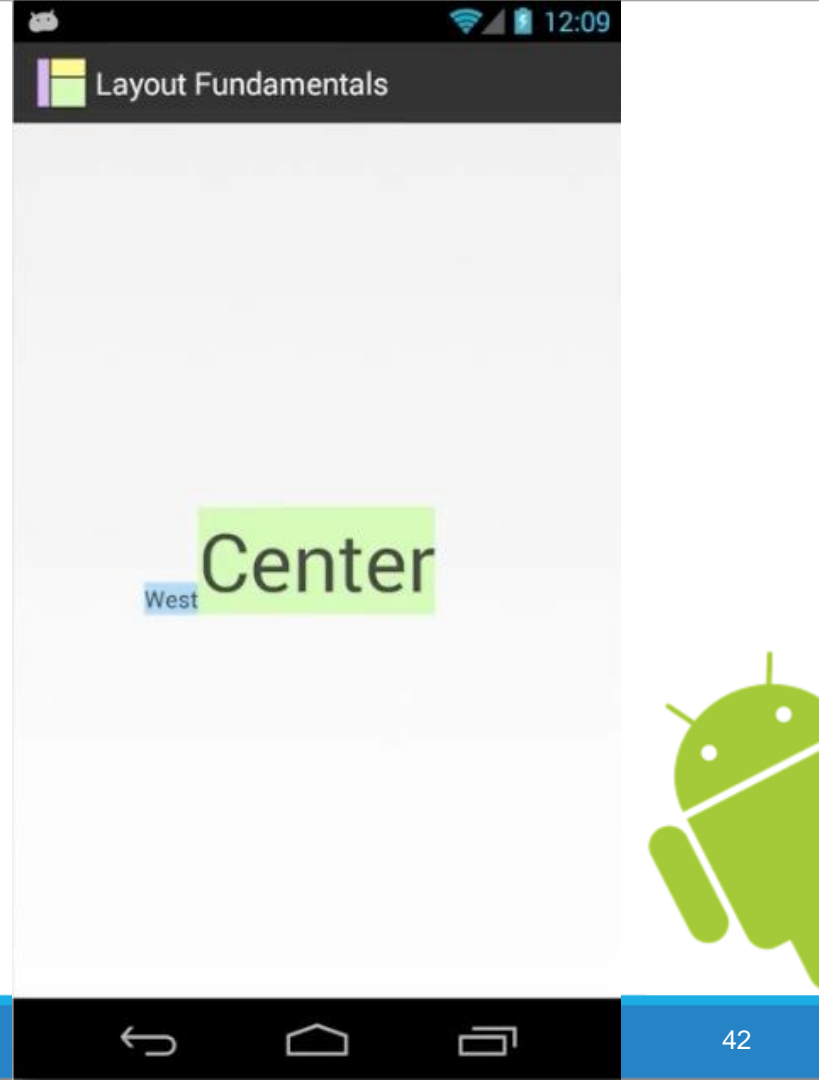
`android:layout_alignTop`



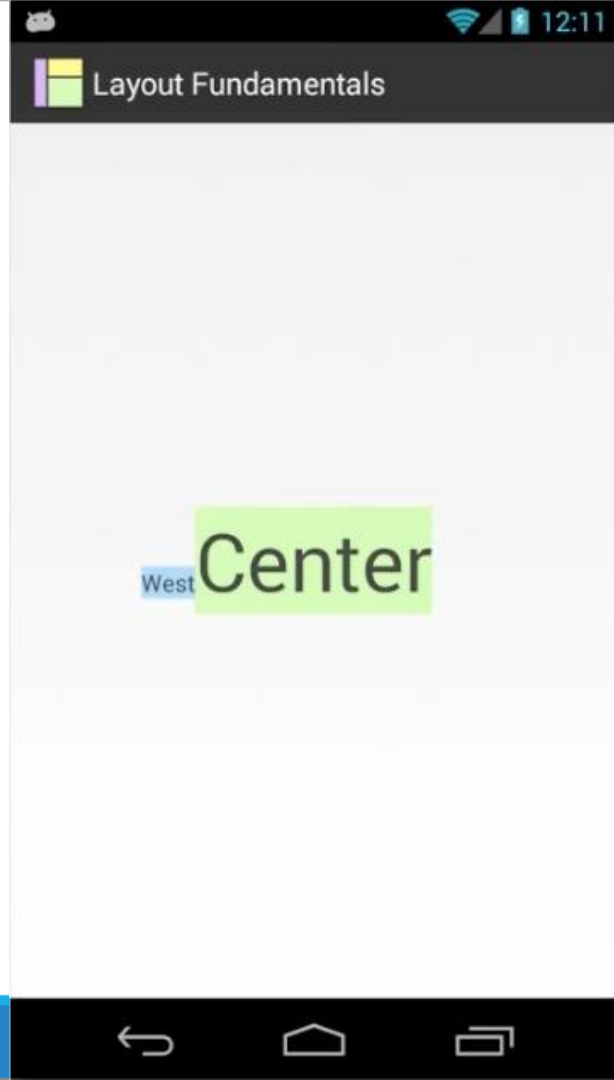
`android:layout_alignRight`



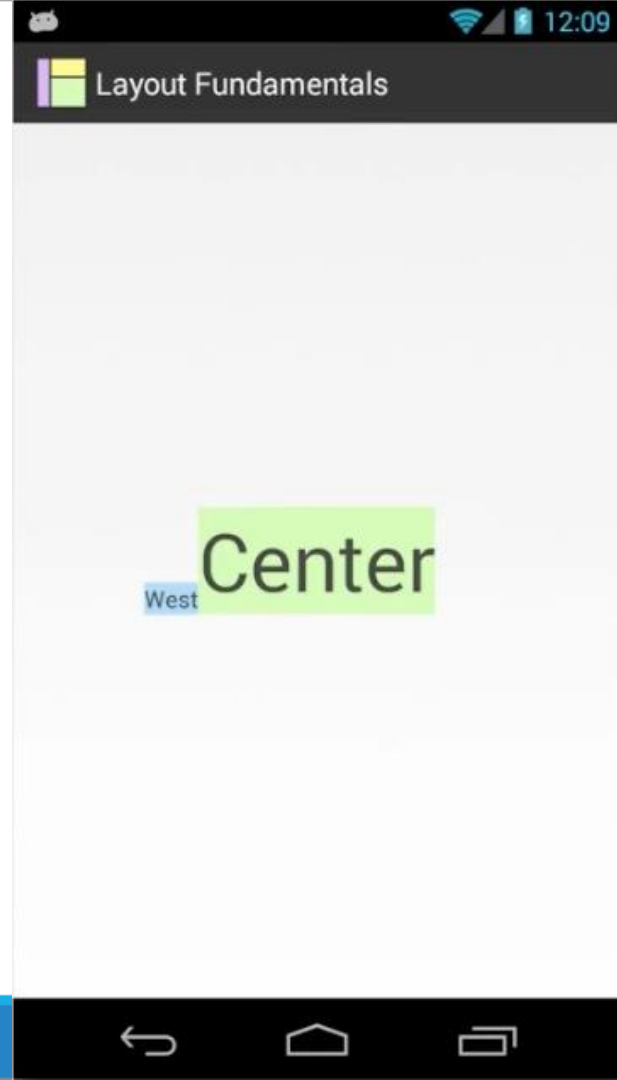
`android:layout_alignBottom`



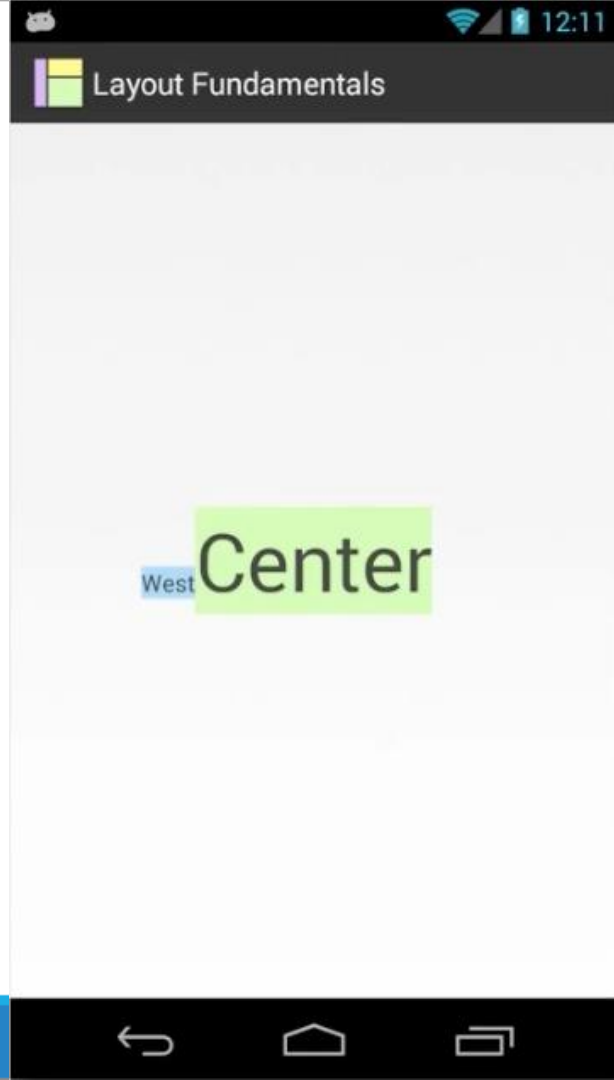
`android:layout_alignBaseline`



`android:layout_alignBottom`



`android:layout_alignBaseline`



`android:layout_alignBaseline`



Relative Alignment

`android:layout_alignTop`

`android:layout_alignBottom`

`android:layout_alignLeft`

`android:layout_alignRight`

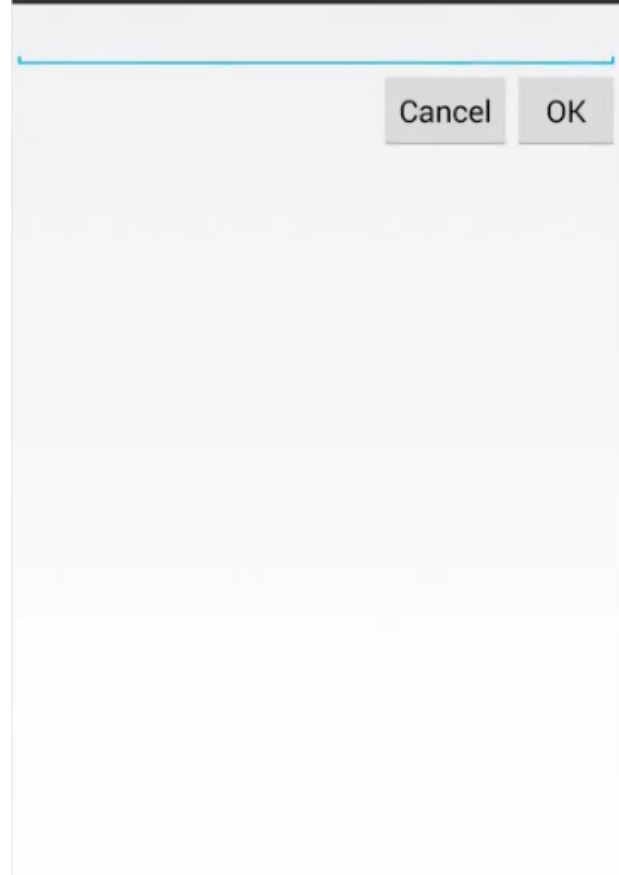
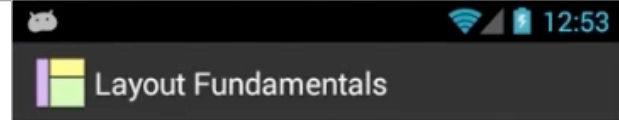
`android:layout_alignBaseline`



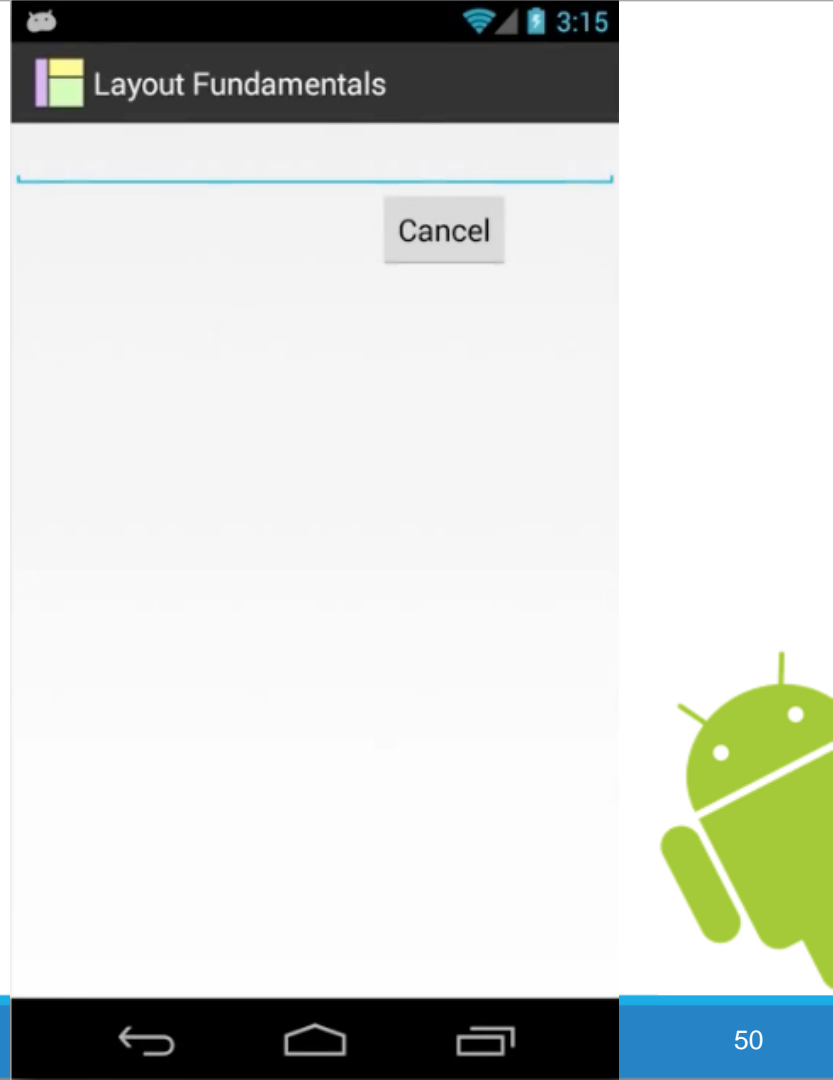
Missing Views



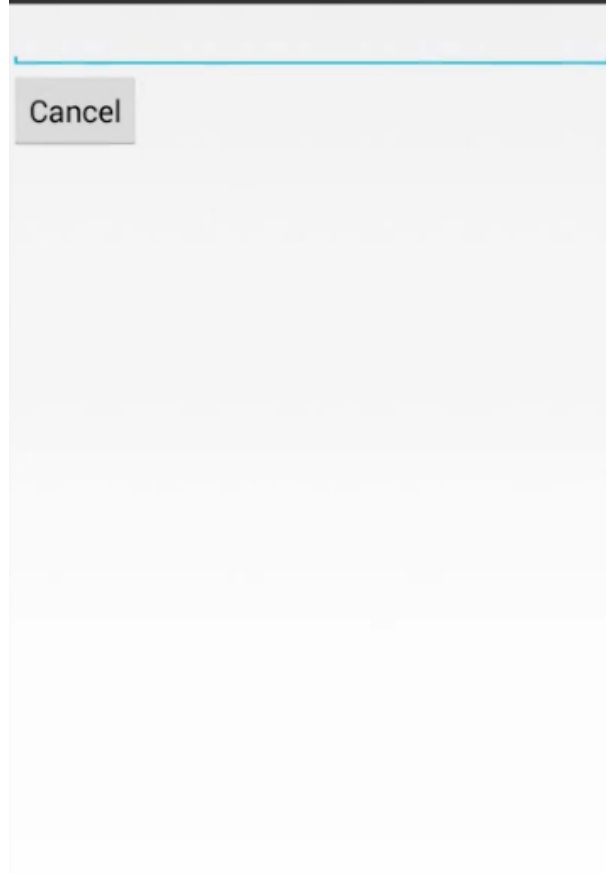
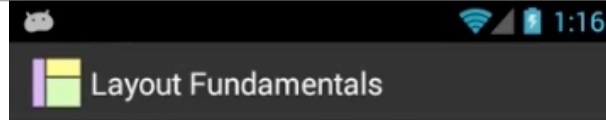

```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btnOk"
        android:layout_below="@id/greeting"
        android:layout_alignParentRight="true"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/ok" />
    <Button
        android:layout_below="@id/greeting"
        android:layout_toLeftOf="@id/btnOk"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/cancel" />
</RelativeLayout>
```



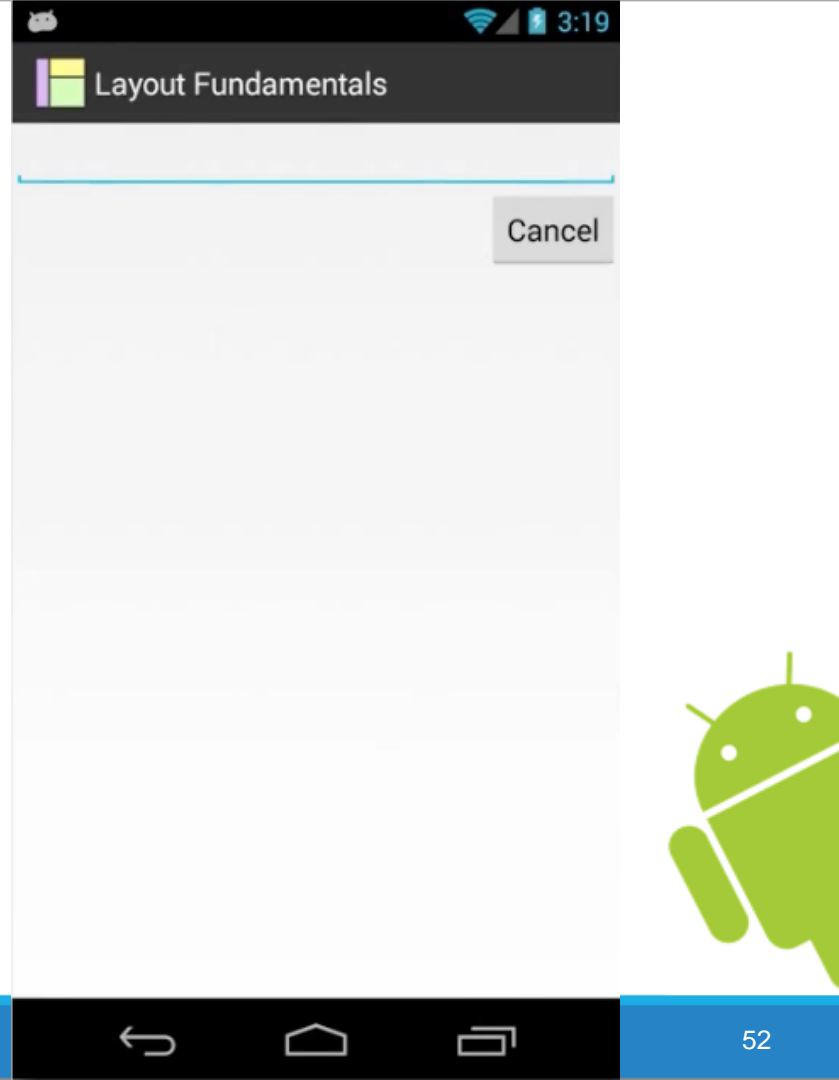
```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btnOk"
        android:layout_below="@id/greeting"
        android:layout_alignParentRight="true"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:visibility="invisible"
        android:text="@string/ok" />
    <Button
        android:layout_below="@id/greeting"
        android:layout_toLeftOf="@id/btnOk"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/cancel" />
</RelativeLayout>
```



```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btnOk"
        android:layout_below="@id/greeting"
        android:layout_alignParentRight="true"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:visibility="gone"
        android:text="@string/ok" />
    <Button
        android:layout_below="@id/greeting"
        android:layout_toLeftOf="@id/btnOk"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/cancel" />
</RelativeLayout>
```



```
<RelativeLayout
    android:layout_width="match_parent"
    android:layout_height="match_parent">
    <EditText
        android:id="@+id/greeting"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
    <Button
        android:id="@+id/btnOk"
        android:layout_below="@id/greeting"
        android:layout_alignParentRight="true"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:visibility="gone"
        android:text="@string/ok" />
    <Button
        android:layout_below="@id/greeting"
        android:layout_toLeftOf="@id/btnOk"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignWithParentIfMissing="true"
        android:text="@string/cancel" />
</RelativeLayout>
```



Default = top left

Relative

- Position
- Alignment

To

- Parent
- Sibling

`alignWithParentIfMissing`



