7. Develop a program to implement Radio Button and Radio Group.

Radio Buttons are used when to select only one item from a list of presented items.

If Radio Buttons are in Radio Group, when one Radio Button within a group is selected, all others are automatically deselected.

Radio Button is generally used with Radio Group. Radio Group is a set of radio buttons, marking one radio button as checked makes all other radio buttons as unchecked. A radio button consists of two states – checked and unchecked. Clicking an unchecked button changes its state to "checked" state and "unchecked" for the previously selected radio button. To toggle a checked state to unchecked state, we need to choose another item.

Following are the important attributes related to Radio Group control.

1. android:checkedButton : This is the id of child radio button that should be checked by default within this radio group.

2. android:orientation : This property on the Radio group defines the orientation to position its child view consisting of Radio Buttons.

Following are the few methods of radio button:

1. check(id): This sets the selection to the radio button whose identifier is passed in parameter. -1 is used as the selection identifier to clear the selection.

2. clearCheck() : It clears the selection. When the selection is cleared, no radio button in this group is selected and getCheckedRadioButtonId() returns null.

3. getCheckedRadioButtonId() : It returns the identifier of the selected radio button in this group. If its empty selection, the returned value is-1.

4. setOnCheckedChangeListener(): This registers a callback to be invoked when the checked radio button changes in this group. We must supply instance of Radio Group OnCheckedChangeListener() to setOnCheckedChangeListener() method.

radioGroup.setOnCheckedChangeListener(

new RadioGroup.OnCheckedChangeListener() {

 @Override

public void onCheckedChanged(RadioGroup group, int checkedId) {

 // Handle clicks here

}

 }

 );

The preceding code, specifically RadioGroup.OnCheckedChangeListener from its opening { to closing }, is what is known as an anonymous class because it has no name.

We need to implement a class, an anonymous class, for the sole purpose of listening for clicks on the RadioGroup.

Commonly used attributes related to **RadioButton** control

Attribute	Description
android:id	It is used to uniquely identify the control
android:checked	It is used to specify the current state of radio button
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 for the radio button.
android:textColor	It is used to change the color of text.

Attribute	Description
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 radio button control.
android:padding	It is used to set the padding from left, right, top and bottom.
android:onClick	It's the name of the method to invoke when the radio button clicked.
android:visibility	It is used to control the visibility of control.