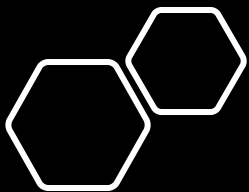# Improved radio button functionality

Kivy radio buttons are created by grouping multiple checkboxes or toggle buttons.

The default behavior allows for all radio buttons to be deselected. This is inconsistent with typical radio button operation. This code forces the last selected button to remain engaged ("down" position) until another radio button is pressed.

File
main.py

```python
from kivy.properties import ObjectProperty, StringProperty # <- Add StringProperty

class MyGrid(Widget)
...
    # State labels
    slabel1 = StringProperty()
    slabel2 = StringProperty()

    def btn(self):
...

    # Callback for the checkbox
    def checkbox_click(self, instance, value):
...

    def savedstate(self):
        # Here we can retrieve user saved radio button state if one exists
        # Assign optional label values
        self.slabel1 = 'On'
        self.slabel2 = 'Off'
        return ['down', 'normal']

    def switchstate1(self):
        # Switch radio button 1 on and process event trigger
        # Force 'down' state to avoid deselecting all radio buttons (Kivy thing)
        self.ids.rbutton1.state = 'down'
        # Update optional label values
        self.slabel1 = 'on'
        self.slabel2 = 'off'
        print
        self.ids.rbutton1.state, self.ids.rbutton2.state

    def switchstate2(self):
        # Switch radio button 2 on and process event trigger
        # Force 'down' state to avoid deselecting all radio buttons (Kivy thing)
        self.ids.rbutton2.state = 'down'
        # Update optional label values
        self.slabel1 = 'off'
        self.slabel2 = 'on'
        print
        self.ids.rbutton1.state, self.ids.rbutton2.state
...
```
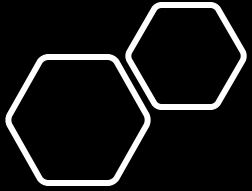
File
my.kv

```
GridLayout:
    cols:2

    Label:
        text: "Add to DB"

    Label:
        text: "Replace DB"


    CheckBox:
        id: rbutton1
        group: 'radio button'
        state: root.savedstate()[0]
        on_press: root.switchstate1()

    CheckBox:
        id: rbutton2
        group: 'radio button'
        state: root.savedstate()[1]
        on_press: root.switchstate2()

    Label:
        id: label1
        text: root.slabel1

    Label:
        id: label2
        text: root.slabel2
```