
Source code of CarBase Module

```
import RPi.GPIO as gpio
import time
import sys
import tkinter as tk

def init():
    gpio.setmode(gpio.BOARD)
    gpio.setup(7, gpio.OUT)
    gpio.setup(11, gpio.OUT)
    gpio.setup(13, gpio.OUT)
    gpio.setup(15, gpio.OUT)

def forward(tf):
    gpio.output(7, False)
    gpio.output(11, True)
    gpio.output(13, True)
    gpio.output(15, False)
    time.sleep(tf)
    gpio.cleanup()

def reverse(tf):
    init()
    gpio.output(7, True)
    gpio.output(11, False)
    gpio.output(13, False)
    gpio.output(15, True)
    time.sleep(tf)
    gpio.cleanup()

def turn_left(tf):
    gpio.output(7, True)
    gpio.output(11, True)
    gpio.output(13, True)
    gpio.output(15, False)
```

```
time.sleep(tf)
gpio.cleanup()
```

```
def turn_right(tf):
    gpio.output(7, False)
    gpio.output(11, True)
    gpio.output(13, False)
    gpio.output(15, False)
    time.sleep(tf)
    gpio.cleanup()
```

```
def pivot_left(tf):
    gpio.output(7, True)
    gpio.output(11, False)
    gpio.output(13, True)
    gpio.output(15, False)
    time.sleep(tf)
    gpio.cleanup()
```

```
def pivot_right(tf):
    gpio.output(7, False)
    gpio.output(11, True)
    gpio.output(13, False)
    gpio.output(15, True)
    time.sleep(tf)
    gpio.cleanup()
```

```
def key_input(event):
    init()
    print('Key:', event.char)
    key_press = event.char
    sleep_time = 0.030
```

```
if key_press.lower() == 'f':
    forward(sleep_time)
elif key_press.lower() == 'b':
    reverse(sleep_time)
elif key_press.lower() == 'l':
    turn_left(sleep_time)
elif key_press.lower() == 'r':
    turn_right(sleep_time)
elif key_press.lower() == 'p':
    pivot_left(sleep_time)
elif key_press.lower() == 'q':
    pivot_right(sleep_time)
else:
    pass
```

```
command = tk.Tk()
command.bind('<KeyPress>', key_input)
command.mainloop()
```