```
var REORIENT
var GO
var BACK
var TURN
var AVOID
var TURNBACK

var state = STOP
var speed = 220
var obstacle =100
timer.period[0]=0
motor.left.target=0
motor.right.target=0


onevent buttons
if state==STOP then
motor.left.target=0
motor.right.target=0
   if button.forward==0 then
       state = REORIENT
      end
end

if button.center==0 then
state=STOP
end



onevent prox
if state == GO then
obstacle = prox.horizontal[2]
   if obstacle >= 2000 then
       timer.period[0]=1000
       state=BACK
   end

elseif state == BACK then
            motor.left.target=-200
            motor.right.target=-200

elseif state == TURN then
            motor.left.target=0
            motor.right.target=-200
```

```
elseif state == AVOID then
        motor.left.target=200
        motor.right.target=200

elseif state == TURNBACK then
        motor.left.target=-200
        motor.right.target=0
        if obstacle>2000 then
            timer.period[0]=0
            timer.period[0]=1000
            state=BACK
        end
end



onevent timer0
    timer.period[0]=0

if state==BACK then
        state=TURN
            timer.period[0]=500

elseif state==TURN    then
        state=AVOID
        timer.period[0]=1200

elseif    state==AVOID then
        state=TURNBACK
        timer.period[0]=2000

elseif state==TURNBACK then
        state=REORIENT
        timer.period[0]=1200
end



onevent acc
if state==REORIENT then
    if acc[1]==0 then
        if acc[0]<-1 then
            motor.left.target=0
            motor.right.target=200
        elseif acc[0]>1 then
```

```
            motor.left.target=200
            motor.right.target=0
        else
            state=GO
            motor.left.target=200
            motor.right.target=200
        end
    else
        if acc[0]&amp;lt;0 then
            motor.left.target=0
            motor.right.target=200
        elseif acc[0]>=0 then
            motor.left.target=200
            motor.right.target=0
        end
    end
end
```