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{{Motor with relay and buttons.spin
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Turns motor on and off using buttons and a relay.}}
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Pub Main                                     {Main checks status of inputs and then turns motor on or off}
  dira[16..22]~~
  outa[16..22]~~

  pin16_status[2]:=1      'P17 is output for motor to run
  pin17_status[2]:=1      'P16 is for LED light indicating power is being sent to motor
  outa[22]:=0
  outa[21]:=0

Repeat
  outa[16] := pin16_status [2]
  outa[17] := pin17_status [2]
  turn_off
  turn_on
  If outa[21]==0
    If Ina[0]==1 and Ina [3]==1
      toggle_17_16_on
  Else
    toggle_17_16_off
  waitcnt (3_000_000 + cnt)

Var                                           'Here the pins are defined using a name
  long pin16_status [2]
  long pin17_status [2]

Pub Turn_on                                   {This turns on the motor (pin 17) and LED light (pin 16) using
button S1.
  If Ina [0] == 1
    pin16_status[2] := 1
    pin17_status[2] := 1

Pub Turn_off                                   'This turns off the motor (pin 17) and LED light (pin 16) using
button S2
  If Ina [3] == 1
    pin16_status[2] :=0
    pin17_status[2] :=0

Pub Toggle_17_16_on
  outa[21]:=1
  outa[22]:=1

Pub Toggle_17_16_off
  outa[21]:=0
  outa[22]:=0

```