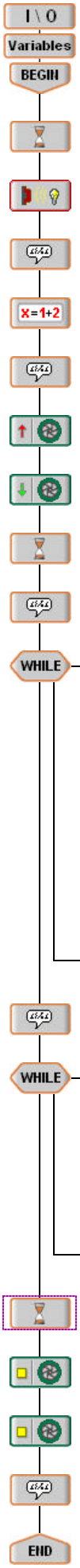


```
void main ( void )
{
Wait ( 1000 ) ;                    // Wait for robot to stop shaking after you turn it on.
level = GetAnalogInput ( 1 ) ;                                  // Store sensor value for level robot.
PrintToScreen ( "Sensor value when level =%d\n" , (int)level ) ;
avgtilt = level ;                  // Initialize average tilt value
PrintToScreen ( "avgtilt =%d\n" , (int)avgtilt ) ;
SetMotor ( 1 , 195 ) ;                    // Start robot moving forward.
SetMotor ( 2 , 60 ) ;                     // Start the robot moving forward.
Wait ( 300 ) ;                     // Wait for motor acceleration to settle to zero.
PrintToScreen ( "Traveling on level surface.\n" ) ;
    while ( avgtilt < (level + 10) )                            // While still on level surface
    {
        tilt = GetAnalogInput ( 1 ) ;                           // Get tilt sensor value.
        PrintToScreen ( "Tilt =%d\n" , (int)tilt ) ;
        avgtilt = ((avgtilt * .9) + (tilt * .1)) ;                                  // Simple way to smoo
        PrintToScreen ( "avgtilt =%d\n" , (int)avgtilt ) ;
    }
PrintToScreen ( "Robot is climbing hill.\n" ) ;                                 // Robot is tilted up so it mu
    while ( tilt > (level - 10) )                               // Keep checking sensor until it reads level.
    {
        tilt = GetAnalogInput ( 1 ) ;                           // Get sensor value
        avgtilt = ((avgtilt * .9) + (tilt * .1)) ;
    }
Wait ( 200 ) ;                     // Wait for robot to reach center of flat hill top.
SetMotor ( 1 , 127 ) ;                    // Stop at top of hill
SetMotor ( 2 , 127 ) ;                    // Stop at top of hill.
PrintToScreen ( "Robot has stopped at top of hill.\n" ) ;                                   // Rob
}
```