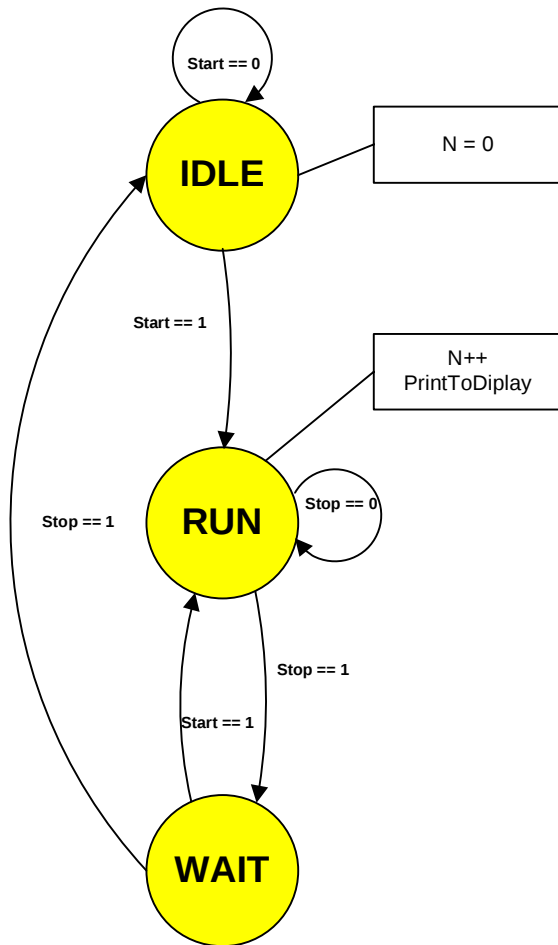




```
typedef enum {IDLE, RUN, WAIT} StateMachineType;

int MyCounter = 0;

void RunStateMachine(int Start, int Stop)
{
    static StateMachineType MyStatMachine;

    switch (MyStatMachine)
    {
        case IDLE:
            if (Start == 1)
                MyStatMachine = RUN;
            MyCounter = 0;
            break;

        case RUN:
            if (Stop == 1)
                MyStatMachine = WAIT;
            MyCounter++;
            // Update the display with the new value
            break;

        case WAIT:
            if (Start == 1)
                MyStatMachine = RUN;
            else if (Stop == 1)
                MyStatMachine = IDLE;
            break;
    }
}
```