

# Coffee Pseudocode

```
FUNCTION SetTime(time)
    get hour from user
    get minute from user
    SET time
    wait for ON (or perhaps time-out)
```

```
FUNCTION GetTime()
    get time from timer
    return time
```

```
FUNCTION DisplayTime(time)
    OUTPUT time
```

```
FUNCTION BrewCoffee()
    WHILE heat sensor < optimal
        Turn on Heat Pad
    WHILE water sensor
        Dispense water
```

```
FUNCTION CheckProgram(time, programTime, machineState)
    IF programTime equals time-out
        SET machineState = ON
```

```
FUNCTION CheckState(button, machineState)
    IF machineState is ON and button is ON
        SET machineState = SETTIME
    ELSE
        SET machineState = button
```

Main

```
machineState = ON / OFF / PROGRAM / SETTIME
SET machineState = OFF
```

```
WHILE minutes pass
    SET time = GetTime()
    DisplayTime(time)
    CheckState(button, machineState)
```

```
    WHILE machineState is ON
        BrewCoffee()
```

```
    WHILE machineState is OFF
        Dispense water off
        Heat Pad off
```

```
    WHILE machineState is PROGRAM
        CheckProgram(time, programTime, machineState)
```

```
    WHILE machineState is SETTIME
        SetTime(time)
```