**FLOW CHART 8.7**

+---------------------------+

| Start |

+---------------------------+

|

v

+---------------------------+

| Method: tick() |

| Increment seconds by 1 |

+---------------------------+

|

v

+---------------------------+

| Is seconds == 60? |

+---------------------------+

/ \

Yes No

/ \

+---------------------------+ +---------------------------+

| Set seconds to 0 | | End of tick() method |

| Increment minutes by 1 | +---------------------------+

+---------------------------+ |

| |

v v

+---------------------------+ +---------------------------+

| Is minutes == 60? | | Method: incrementMinute()|

+---------------------------+ | Increment minutes by 1 |

/ \ +---------------------------+

Yes No |

/ \ v

+---------------------------+ +---------------------------+

| Set minutes to 0 | | Is minutes == 60? |

| Increment hours by 1 | +---------------------------+

+---------------------------+ / \

| Yes No

v / \

+---------------------------+ +---------------------------+

| Is hours == 24? | | End of incrementMinute() |

+---------------------------+ +---------------------------+

/ \ |

Yes No v

/ \ +---------------------------+

+---------------------------+ | Method: incrementHour() |

| Set hours to 0 | | Increment hours by 1 |

| Increment day by 1 | +---------------------------+

+---------------------------+ |

| v

v +---------------------------+

+---------------------------+ | Is hours == 24? |

| End of incrementHour() | +---------------------------+

+---------------------------+ / \

| Yes No

v / \

+---------------------------+ +---------------------------+

| End of Program | | End of incrementHour() |

+---------------------------+ +---------------------------+

**FLOWCHART 8.8**

+---------------------------+

| Start |

+---------------------------+

|

v

+---------------------------+

| Method: nextDay() |

| Increment day by 1 |

+---------------------------+

|

v

+---------------------------+

| Is day > daysInMonth? |

+---------------------------+

/ \

Yes No

/ \

+---------------------------+ +---------------------------+

| Set day to 1 | | End of nextDay() method |

| Increment month by 1 | +---------------------------+

| Is month > 12? | |

+---------------------------+ v

/ \ +---------------------------+

Yes No | Set month to 1 |

/ \ | Increment year by 1 |

+---------------------------+ +---------------------------+

| Set month to 1 | |

| Increment year by 1 | v

+---------------------------+ +---------------------------+

| | End of nextDay() method |

v +---------------------------+

+---------------------------+

| End of Program |

+---------------------------+

**FLOWCHART 8.12**

+---------------------------+

| Start |

+---------------------------+

|

v

+---------------------------+

| Method: incrementHour() |

| Increment hours by 1 |

+---------------------------+

|

v

+---------------------------+

| Is hours == 24? |

+---------------------------+

/ \

Yes No

/ \

+---------------------------+ +---------------------------+

| Set hours to 0 | | End of incrementHour() |

| Call nextDay() method | +---------------------------+

+---------------------------+ |

| v

v +---------------------------+

+---------------------------+ | Method: nextDay() |

| Method: nextDay() | | Increment day by 1 |

| Increment day by 1 | +---------------------------+

+---------------------------+ |

| v

v +---------------------------+

+---------------------------+ | Is day > daysInMonth? |

| Is day > daysInMonth? | +---------------------------+

+---------------------------+ / \

/ \ Yes No

Yes No / \

/ \ +---------------------------+

+---------------------------+ | Set day to 1 |

| Set day to 1 | | Increment month by 1 |

| Increment month by 1 | +---------------------------+

+---------------------------+ |

| v

v +---------------------------+

+---------------------------+ | Is month > 12? |

| Is month > 12? | +---------------------------+

+---------------------------+ / \

/ \ Yes No

Yes No / \

+---------------------------+ +---------------------------+

| Set month to 1 | | End of nextDay() method|

| Increment year by 1 | +---------------------------+

+---------------------------+ |

| v

v +---------------------------+

+---------------------------+ | End of Program |

| End of Program | +---------------------------+

+---------------------------+