```cpp
1  /*
2   * Name: Rifa Safeer Shah
3   * CECS 282 Assignment 2
4   * Last Updated
5   */
6
7  #include <iostream>
8  #include "Time.h"
9  #include <ctime>
10 #include <iostream>
11 #include <sstream>
12 #include <time.h>
13 #include <stdio.h>
14
15 using namespace std;
16
17 /* Default Constructor */
18 Time::Time()
19 {
20     secs = 0;
21 } //ends Default Constructor
22
23 /* Overload Constructor */
24 Time::Time(time_t t)
25 {
26     this->secs = t;
27 } //ends Overload Contructor
28
29 /* Copy Constructor */
30 Time :: Time(const Time& t)
31 {
32     (*this).secs = t.secs;
33 } //ends Copy Constructor
34
35 /* Get MMDDYYYY */
36 string Time::getMMDDYYYY() const
37 {
38     ostringstream date;
39     tm* gmtm = gmtime(&secs);
40     int month = gmtm->tm_mon + 1;
41     int day = gmtm->tm_mday;
42     int year = gmtm->tm_year + 1900;
43     date << month << "/" << day << "/" << year;
44     return date.str();
45 } //ends Get MMDDYYYY
46
47 /* Get Year */
48 string Time::getYear() const
49 {
```

```cpp
50      time_t currentTime = secs;
51      struct tm* timeinfo;
52      time(&currentTime);
53      timeinfo = localtime(&currentTime);
54      char buffer[80];
55      strftime(buffer, 80, "%G", timeinfo);
56      return buffer;
57  } //ends Get Year
58
59  /* Compare Time */
60  int Time::compareTime(const Time& t)
61  {
62      if (secs - t.secs == 0)
63      {
64          return 0;
65      }
66      else if (secs - t.secs < 0)
67      {
68          return 1;
69      }
70      else
71      {
72          return -1;
73      }
74  } //ends Compare Time
75
76  /* To String */
77  string Time::toString() const
78  {
79      tm* gmtm = gmtime(&secs);
80      char* dateTime = asctime(gmtm);
81      return dateTime;
82  } //ends To String
```