

Assignment

Code-

```
C++ time.cpp X
C++ Lab > C++ time.cpp > ...
1  /*
2  Aditya Aparadh
3  PRN: 22610082 SVIT S3
4  Program to add two Time Objects
5  */
6
7  #include <iostream>
8  using namespace std;
9
10
11  class Time{
12  private:
13      int seconds=0, minutes=0, hours=0;
14
15  public:
16      Time(int hrs, int min, int sec) {
17          seconds = sec;
18          minutes = min;
19          hours = hrs;
20      }
21
22      // Getter Functions
23      int getSeconds(){
24          return seconds;
25      }
26      int getMinutes(){
27          return minutes;
28      }
29      int getHours(){
30          return hours;
31      }
32
33
34  // Add Time Function
35  Time addTime(Time t2) {
36      int sec = seconds + t2.getSeconds();
37      int Mcarry = 0, Hcarry = 0;
38      if (sec > 59) {
39          Mcarry = sec / 60;
40          sec %= 60;
41      }
42      int min = minutes + t2.getMinutes() + Mcarry;
43      if (min > 59) {
44          Hcarry = min / 60;
45          min %= 60;
46      }
47      int hrs = (hours + t2.getHours() + Hcarry) % 24;
48      Time t = Time(hrs, min, sec);
49      return t;
50  }
51
52
53
54  //Display time function
55  void PrintTime(){
56      string HRS = to_string(hours), MIN = to_string(minutes), SEC = to_string(seconds); //For Proper Formatting of Time
57      if(hours<10){
58          HRS = "0" + to_string(hours);
59      }
60      if(minutes<10){
61          MIN = "0" + to_string(minutes);
62      }
63      if(seconds<10){
64          SEC = "0" + to_string(seconds);
65      }
66      cout << HRS << ":" << MIN << ":" << SEC << endl;
67  }
68  };
69
70
71
```

```
72 int main() {  
73     Time a = Time(4,46,11);  
74     Time b = Time(6,35,54);  
75  
76     Time c = a.addTime(b);  
77  
78     c.PrintTime();  
79     return 0;  
80 }
```

Output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL  
[ ] ~/Documents/Academics/C Cpp Lab g++ time.cpp -o time  
[ ] ~/Documents/Academics/C Cpp Lab ./time  
11:22:05
```