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10-September-2014

CST-183-FA110-14FA-COURSE

This program will prompt the user to input a time and then prompt for the duration of an event, after receiving these the program will add the time taken to the start time, resulting in the end time of the event.

Step 1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Start Hours | Start Minutes | Duration(in minutes) | Ending Hour  (Military time) | Ending Minute |
| 1 | 30 | 120 | 15 | 30 |
| 11 | 45 | 60 | 12 | 45 |
| 12 | 40 | 90 | 14 | 10 |
| 10 | 0 | 240 | 12 | 00 |

Step 2.

int hoursInMinutes

int minutes

int startingTime

int endingMins

int endingHours

int duration

hoursInMins \*= 60

startingTime = hoursInMins + Mins

endingTime = startingTime + duration

endingMins = endingTime % 60

endingHours = endingTime / 10

Step 3.

System.out.print(“What is the starting time?: “)

hoursInMins = keyboard.NextDouble()

Mins = keyboard.NextDouble()

System print(“Duration”)

Duration = keyboard.NetDouble()

// Use the math formulas

Display the hours in military

Display the minutes

Step 4.

/\*===============================================  
EndingTime created by Nathan Gaffney  
THis program will take a time entered by user,  
add the duration of an event and then,  
will convert that time from military to standard.  
10-Sep-2014  
THere are no other program dependencies.  
===============================================\*/  
import java.util.Scanner;  
public class EndingTime  
{  
 public static void main(String [] args)  
 {  
 // Variable declarations  
 int hoursInMins;  
 int minutes;  
 int startingTime;  
 int endingTime;  
 int endingMins;  
 int endingHours;  
 int duration;  
 // Hint: All variables need to be declared as integers  
 // Create a Scanner object to read from the keyboard  
 Scanner keyboard = new Scanner(System.in);  
   
 // Get the starting time in hours and minutes  
 System.out.print("What is the starting time?: ");  
 hoursInMins = keyboard.nextInt();  
 minutes = keyboard.nextInt();  
 // Get the duration time in minutes  
 System.out.print("How long does it last (in minutes)?: ");  
 duration = keyboard.nextInt();  
 // Calculate the ending time   
 startingTime = hoursInMins\*60 + minutes;  
 endingTime = startingTime + duration;  
 endingHours = endingTime / 60; //Breaks time into hours  
 endingMins = endingTime % 60; //Gets minutes  
 endingHours = ((endingHours+11)%12)+1;  
 System.out.println("Ending hours is " +endingHours);  
 System.out.println("Ending minute is " + endingMins);  
 // Display the output  
 }  
}

Step 5.

¼¼§ÏWhat is the starting time?: 12 25  
¼¼§ÏHow long does it last (in minutes)?: 145  
ÏÏ§ÏEnding hours is 2  
ÏÏ§ÏEnding minute is 50