

Object Oriented Programming LAB – BSDSF22

(Morning and Afternoon)

Lab 03 – 22-09-2023

Write similar code for time span objects as you learnt with vector example, provided with this LAB assignment. For ease and simplicity assume each time span objects have two **int** type data members hours and minutes. You have to create class named Timespan with following member functions:

show(self): to output (print) a time span object associated with its parameter (the **self** variable) in the **2 hours and 20 minutes** format where 2 and 20 are the values of appropriate data members.

add_hours(self, hrs): to add value of **int** type parameter **hrs** to **time span** object **self**. For example, if data members of self are 3 and 40 and hrs is 2, after the function **add_hours** the data members of self must update to 5 and 40.

add_minutes(self, mins): to add value of **int** type parameter **mins** to **time span** object **self**. For example, if data members of self are 3 and 40 and mins is 30, after the function **add_minutes** the data members of self must update to 4 and 10. As an example, if data members of self are 3 and 40 and mins is 80, after the function **add_minutes** the data members of self must update to 5 and 0.

change(self, ts): to return absolute difference of two **time span** objects **self** and **ts** in minutes. For example, if data members of self are 2 and 30 and that for ts are 7 and 45, the difference is 5 and 15, but change function returns an int value equal to 315 ($5*60+15$).

In **main** create a **time span** objects, and call the above functions appropriately to demonstrate the working of time span class and its member functions.

Obtain all above functionalities with identical output but using only one data member.

***** The End *****