

Exercise 05 – Classes and objects

- 1) a) Create a class time that contains the variables hours, minutes and seconds
b) Create a function called convertSeconds(int seconds) that gets as an input an integer values of seconds. The method should convert the second into hour, minutes and second and return the time object.

```
Static Time convertSeconds(int seconds){  
    Time t = new Time();  
    //perform conversion and assign values  
    return t;  
}
```

- c) Create a main class that asks the user to input an integer value of seconds. Convert the seconds using the convertSeconds method and print it to the console.

- 2) a) Create a class Date that contains days, month and year as variable.
b) Write a method that print dates in the following format: day.month.year - *static void printDate(Date d)*
c) Write a method that can return the number of days between two days. Take leap years into account (if too complicated you can skip the leap year part)
You will need to create two methods:
static int dayDiff(Date d1, Date d2) – Calculated the difference
which uses the following method for the calculation:
static int daysSince0(Date d)- Return the number of days since 1.1.0000 (assuming Gregorian calendar)
d) Print the two dates and the difference in days.

Sample inputs:

```
12 3 2001 3 4 2001  
14 7 1789 12 3 2001  
14 7 1789 4 7 1776  
12 3 2001 12 3 2001  
1 1 0000 30 8 2001
```