



Ministry of Education
FEDERAL INSTITUTE OF EDUCATION, SCIENCE AND TECHNOLOGY OF SÃO PAULO
CUBATÃO CAMPUS

Subject: CBTLP1 (Java) – ADS 371 – Professor: Wellington Tuler Moraes
Name: _____ Date: __/__/____

PRACTICAL WORK 04: Build the Data class, as specified below, this exercise will form the final assessment, therefore it will be mandatory to prepare it for the final test.

Create the Data class as specified below:

Date
- day: int - month: int - year: int
+ Date() + Data(int d, int m, int a) + enterDay(int d) + enterMonths(int m) + enterYear(int a) + enterDay() + enterMonth() + enterYear() + retDia(): int + retMes(): int + retYear(): int + show1(): String + show2(): String + leap(): boolean + daysElapsed(): int + presentsCurrentData():void

- The Data() constructor should allow the user to enter the day, month and year values and use them to initialize the class attributes. The values entered must be consistent and only accepted if valid, otherwise, retype;
- The Data(int d, int m, int a) constructor must receive the values of day, month and year and use them to initialize the class properties;
- The methods enterDia(int d), enterMonths(int m) and enterYear(int a) must receive a value and assign it to the respective properties;
- The entraDia (), entraMes () and entraAno () methods must allow the user to enter a value and assign it to the respective property. The values entered must be consistent and only accepted when valid, otherwise, ask the user to retype;
- The retDia(), retMes() and retAno() methods must return their respective properties;
- The SHOW1() method should return the date in the format: dd/mm/yyyy;
- The Mostra2() method must return the date in the format: dd/monthByExtenso/ano;
- The leap year () method must return a boolean informing us whether the year is a leap year or not;
- The daysPast method must return the number of days that have passed in the year up to the date entered.
- The presentDataCurrent() method must print the current date, using the Date and DateFormat classes, the DateFormat using the following method: getDateInstance(DateFormat.FULL);
- It is convenient to implement exception handling for possible inconsistencies in data entry.

Exercise 02

Now, develop a program capable of testing the class and methods developed in the previous exercise.