**PRORATE CALCULATOR**

This program assumes that customer already has an account with service provider and is adding a new service. An example can be as below:

Customer XYZ has a service with Company ABC and the billing date is set to 15th of every month to withdraw recurring amount. Assume that for current month the billing period runs from January 15th to Feb 15th. If XYZ adds a new service on Feb 5, the prorated amount due will be charged based on 10 days (i.e. Feb 15 - Feb 5 = 10 days) of service.

**Method Details**

**public static Date convertStringToDate(String s)**

This method takes a string type argument in the format mm/dd/yyyy and converts into Date object. The statement 'df.setLenient(false)' ensures the validity of the dates.

**public static int getDays (Date d1, Date d2)**

This method calculates number of days between two dates

**public static int getBillingPeriod (Date d1)**

This method calculates number of days in a billing period. The input argument is a Date object. The program adds 1 month to the input argument using Calendar methods and then converts the Calendar to a Date object. The getDays() method is invoked on two dates to calculate the billing period.

**public static double getAmount (double charge, Date bill, Date service)**

This method calculates the actual pro-rated amount due. Input arguments are a double value that is normal monthly fee for a full billing period. Date object bill refers to the start date of current billing cycle and Date object service refers to the date when a service is started.