**Package Summary: com.randstand.cal**

Link to javadoc: [file:///C:/Users/aksha/eclipse-workspace/assignment/Cal/doc/com/randstand/cal/package-summary.html](C://Users/aksha/eclipse-workspace/assignment/Cal/doc/com/randstand/cal/package-summary.html)

1. To Calculate the number of days between any 2 dates without using the Java Date/Calendar classes for computation.

**Solution:** Two dates are taken as input from the user. Both the dates are then converted to seconds since EPOCH(1970). The two dates in seconds are then subtracted and divided by 24\*3600 to get the number of days between any two dates.

**Classes:**

* Demo – The Demo class is user-interactive test class with main function.
* Calendar - The Calendar class implements the Calendar interface.
* Date – Data model to store Date parameters
* CONSTANTS – helper class to store all the mappings.

**Interface:**

* ICalendar - The ICalendar interface is a bluebrint which specifies a set of methods that the class has to implement.

**Exception:**

* InvalidDateFormatException - The InvalidDateFormatException is user-defined exception class extended from the class Exception

1. To Calculate number of time zones between any 2 time zones.

**Solution:** Two timezones are taken as input from the user. Both the timezones are checked for validation and offset from UTC are calculated. The number of timezones are then retrieved between then by using the Hashmap which holds the mapping of all the timezones and their respective UTC offsets.

**Classes:**

* Demo - The Demo class is user-interactive test class with main function.
* Timezone – Data model to store Date parameters
* Timezonehelper - Represents the entire operations regarding timezones
* CONSTANTS – helper class to store all the mappings.

**Exception:**

* TimezoneException - The InvalidDateFormatException is user-defined exception class extended from the class Exception

**# Sample output**

