Exercise Series 2

Task 2.1: Assume the Gregorian calendar with granularities Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Weekend, Weekday, Day, Week, Month, Year. Day is the base granularity.

Use granularity operations to define the following granularities: FirstDayOfMonth, Thanksgiving, FutureYears (i.e., all years after 2017).

Hint: Thanksgiving is the fourth Thursday of November.

Task 2.2: Use granularity operations to define the Gregorian calendar with granularities Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, Weekend, Weekday, Day, Week, Month, Year.

Hint: In order to define the granularity for months first define a granularity for pseudo months, which ignores leap years.

Task 2.3: Assume the timeline starts January 1, 2009. Convert the granule (Year/2010, Month/5, Day/26) into a (Week, Day) granule. Do this step by step and show the corresponding labels.