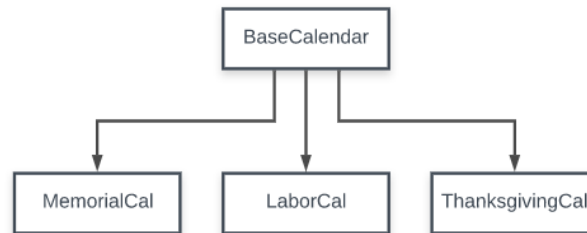


DATA 200 Spring 2020 Homework 8

Due April 25, 2020 at 11:59pm

Note: Please only use python standard libraries covered in class lectures (i.e. json, csv, urllib etc). Other libraries such as pandas, numpy are *not* allowed in your work.

1. This problem is an extension to problem 1 in HW#7. Write python classes to capture the following hierarchy of special days in US calendar:



The base class **BaseCalendar** should have the following member functions:

- `__init__()` – constructor to initialize a **BaseCalendar** object with a specified year (as an input argument).
- `print_day()` – prints out the special day. For the base class, this prints out the President's Day of the year.

For each of the derived classes, you should override the `print_day()` method to output the corresponding special day (i.e. Memorial Day for **MemorialCal** class, Labor Day for **LaborCal** class and Thanksgiving Day for **ThanksgivingCal** class). Here are sample usages and outputs for **BaseCalendar** and its derived classes:

```
base = BaseCalendar(2020)
base.print_day()           # prints out "2020-02-17"

mem = MemorialCal(2020)
mem.print_day()            # prints out "2020-05-25"

labor = LaborCal(2019)
labor.print_day()          # prints out "2019-09-02"

thanks = ThanksgivingCal(2019)
thanks.print_day()         # prints out "2019-11-28"
```

(15 points)