./

GENESIS – Advanced Python Project Report

CALENDAR



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| **Ver. Rel. No.** | **Release Date** | **Prepared. By** | **Reviewed By** | **To be Approved** | **Remarks/Revision Details** |
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### 1.Python project Calendar

### 1.1 Code

import datetime

import calendar

import sys

class cal\_end:

def \_\_init\_\_(self):

pass

def entire\_year(self):

yy = int(input("enter year: "))

print(calendar.calendar(yy))

print(" ")

def month\_year(self):

yy = int(input("Enter year: "))

mm = int(input("Enter month: "))

# display the calendar

print(" ")

print(calendar.month(yy, mm))

def week\_day(self):

date = str(input("Enter the date(for example:09 02 2019) :"))

day\_name = ['Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat', 'Sun']

day = datetime.datetime.strptime(date, '%d %m %Y').weekday()

print(day\_name[day])

print("\n")

def leap\_year(self):

year = int(input("Enter a year:- "))

# Here, you take the input from the user

if(((year % 4 == 0) and (year % 100 != 0)) or (year % 400 == 0)):

print("{0} is a leap year!!\n".format(year))

else:

print("{0} is not a leap year!!\n".format(year))

def cal\_age(self):

birth\_year = int(input("Enter your year of birth: "))

birth\_month = int(input("Enter your month of birth: "))

birth\_day = int(input("Enter your day of birth: "))

current\_year = datetime.date.today().year

current\_month = datetime.date.today().month

current\_day = datetime.date.today().day

age\_y = current\_year - birth\_year

age\_m = abs(current\_month-birth\_month)

age\_d = abs(current\_day-birth\_day)

print("Your age is: ", age\_y, "Years", age\_m, "months and", age\_d,

"days\n")

cal\_obj = cal\_end()

while(1):

print("1.Printing the Entire year")

print("2.Printing the month of the year")

print("3.Printing the day")

print("4.Checking leap year or not")

print("5.Calculate age")

print("0.exit")

n = int(input("Enter your option: "))

if n == 1:

cal\_obj.entire\_year()

elif n == 2:

cal\_obj.month\_year()

elif n == 3:

cal\_obj.week\_day()

elif n == 4:

cal\_obj.leap\_year()

elif n == 5:

cal\_obj.cal\_age()

elif n == 0:

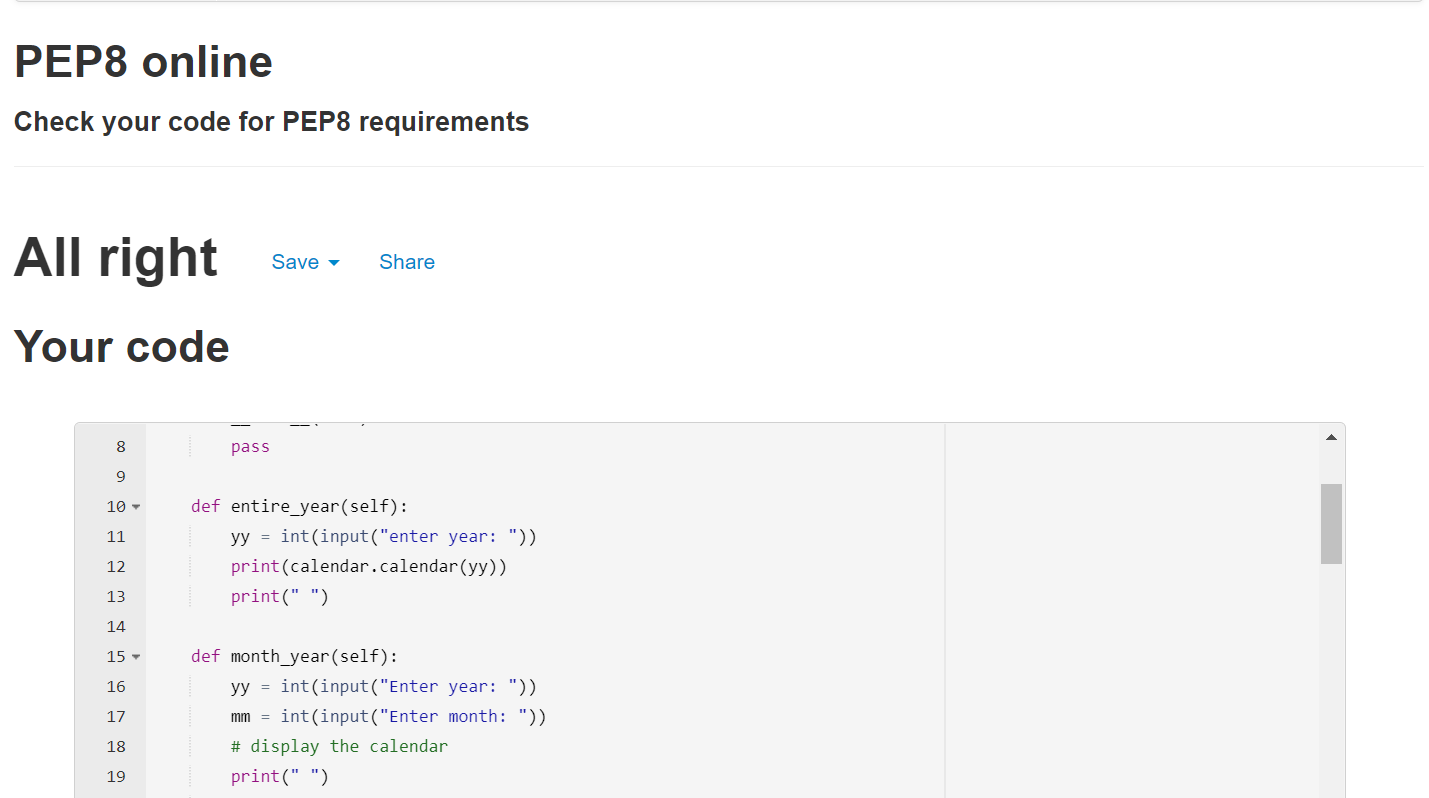
sys.exit()

else:

print("invalid option")

print("try again")

### 1.2 pep8 snapshot



### 2.With implementing Inheritance & Oops concepts

### 2.1 Code

import datetime

import calendar

import sys

import re

class age():

def cal\_age(self):

birth\_year = int(input("Enter your year of birth: "))

birth\_month = int(input("Enter your month of birth: "))

birth\_day = int(input("Enter your day of birth: "))

current\_year = datetime.date.today().year

current\_month = datetime.date.today().month

current\_day = datetime.date.today().day

age\_year = current\_year - birth\_year

age\_month = abs(current\_month-birth\_month)

age\_day = abs(current\_day-birth\_day)

print("Your age is: ", age\_year, "Years", age\_month,

"months and", age\_day, "days\n")

class cal\_end(age):

def \_\_init\_\_(self):

pass

def entire\_year(self):

yy = int(input("enter year: "))

print(calendar.calendar(yy))

print(" ")

class new\_cal():

def month\_year(self):

yy = int(input("Enter year: "))

mm = int(input("Enter month: "))

# display the calendar

print(" ")

print(calendar.month(yy, mm))

class new\_cal2(new\_cal, cal\_end):

def week\_day(self):

date = str(input("Enter the date(for example:09 02 2019) : "))

day\_name = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday',

'Saturday', 'Sunday']

day = datetime.datetime.strptime(date, '%d %m %Y').weekday()

print(day\_name[day])

print("\n")

class new\_cal3(new\_cal2, age):

def leap\_year(self):

year = int(input("Enter a year: "))

# Here, you take the input from the user

if(((year % 4 == 0) and (year % 100 != 0)) or (year % 400 == 0)):

print("{0} is a leap year!!\n".format(year))

else:

print("{0} is not a leap year!!\n".format(year))

cal\_obj = new\_cal3()

print("Welcom..!")

while(1):

print("Please Select your Option")

print("1.Printing the Entire year")

print("2.Printing the month of the year")

print("3.Printing the day")

print("4.Checking leap year or not")

print("5.Calculate age")

print("0.Exit")

n = int(input("Enter your option: "))

if n == 1:

cal\_obj.entire\_year()

print(re.match("[a-z]{3}", "cal\_obj.entire\_year"))

elif n == 2:

cal\_obj.month\_year()

print(re.search("[a-z][1 2]", "cal\_obj.month\_year"))

elif n == 3:

cal\_obj.week\_day()

print(re.match("[a-z]", "cal\_obj.week\_day"))

elif n == 4:

cal\_obj.leap\_year()

print(re.findall("[1 4]", "cal\_obj.leap\_year"))

elif n == 5:

cal\_obj.cal\_age()

print(re.findall("[a-z]", "cal\_obj.cal\_age"))

elif n == 0:

sys.exit()

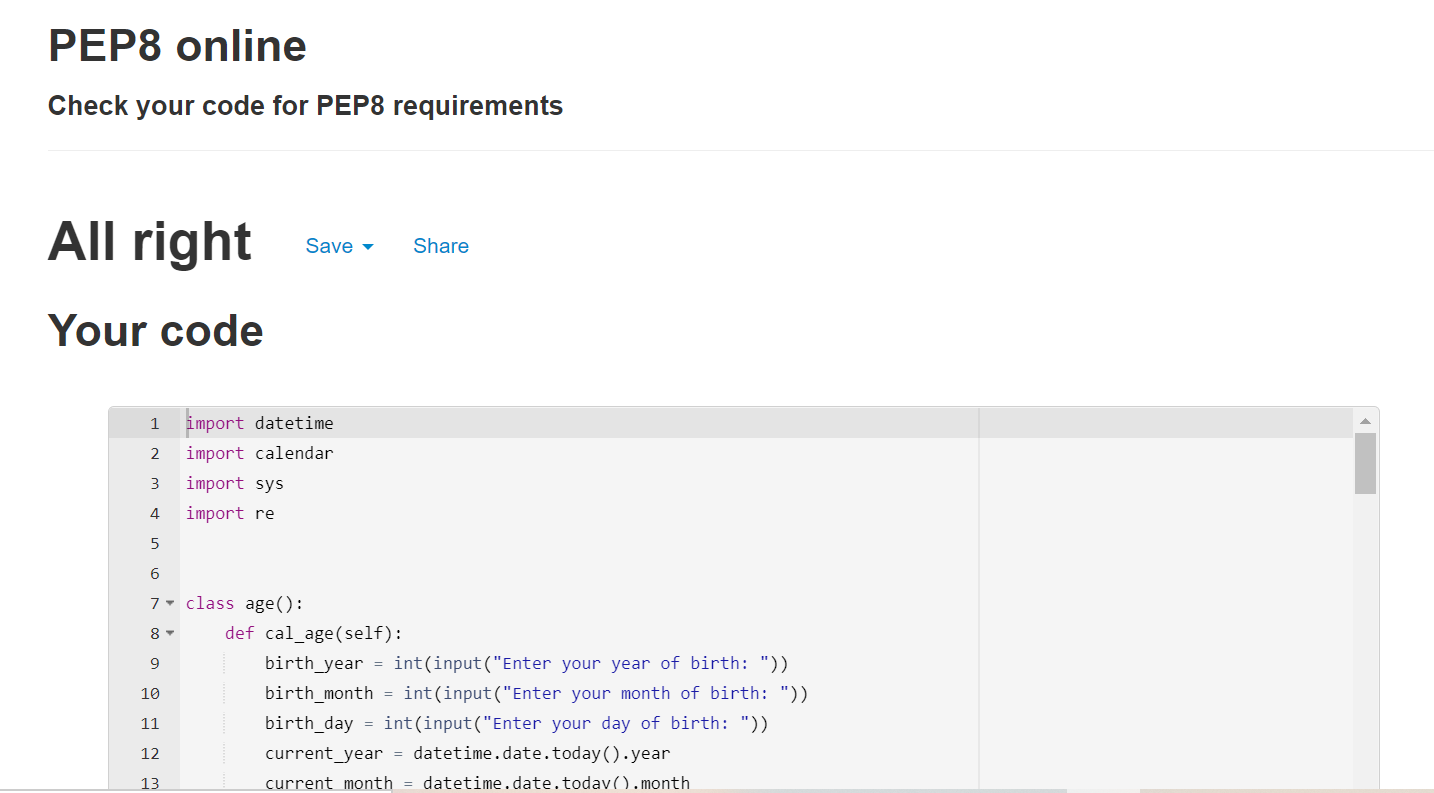
else:

print("Invalid option")

print("Try again")

print("\n")

### 2.2 Pep8 Snapshot



3.GIT LINK: <https://github.com/99003201/python_project>