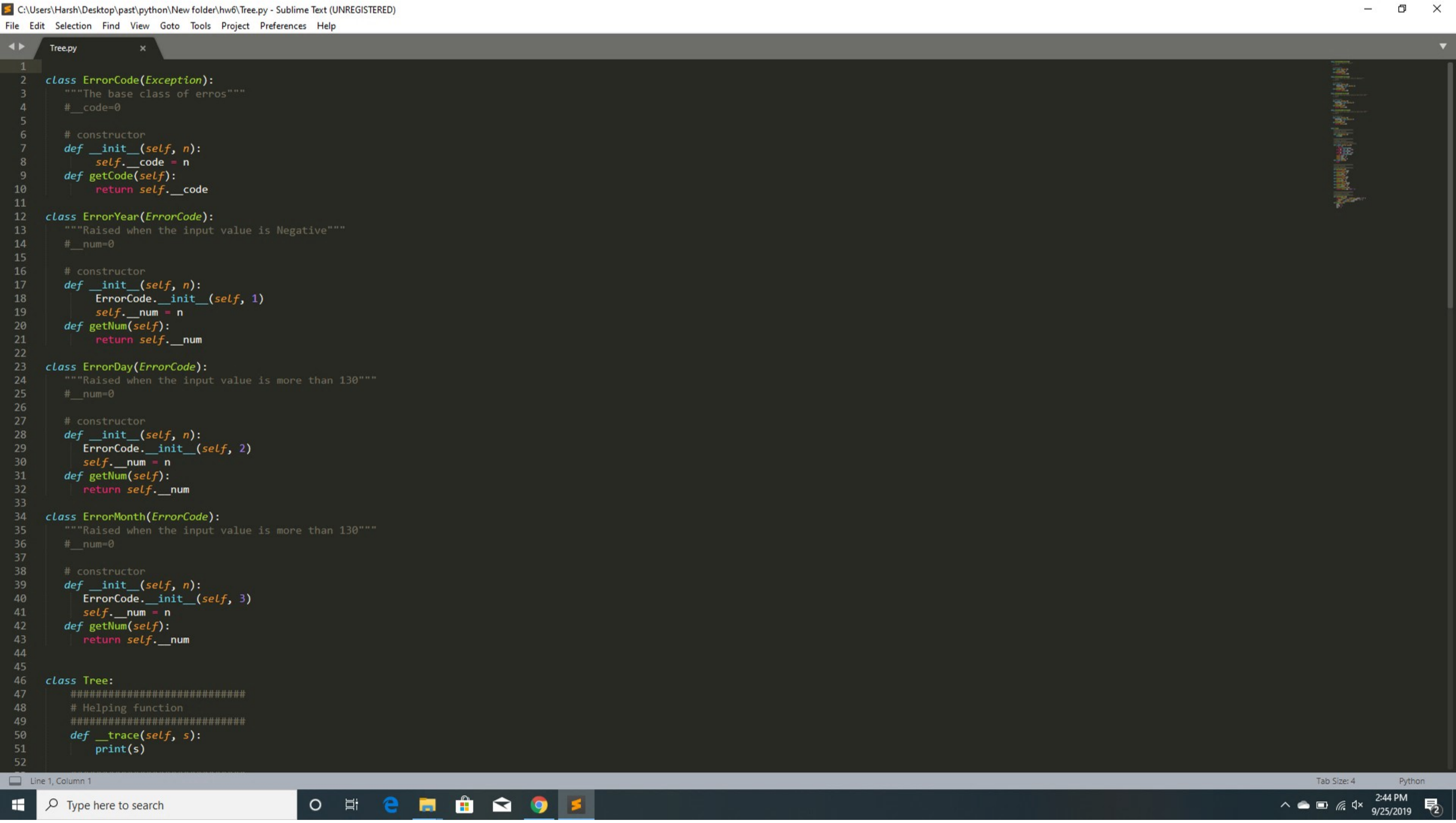
C:\Users\Harsh\Desktop\past\python\New folder\hw6\Tree.py - Sublime Text (UNREGISTERED)
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Tree.py
Line 1, Column 1
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Python
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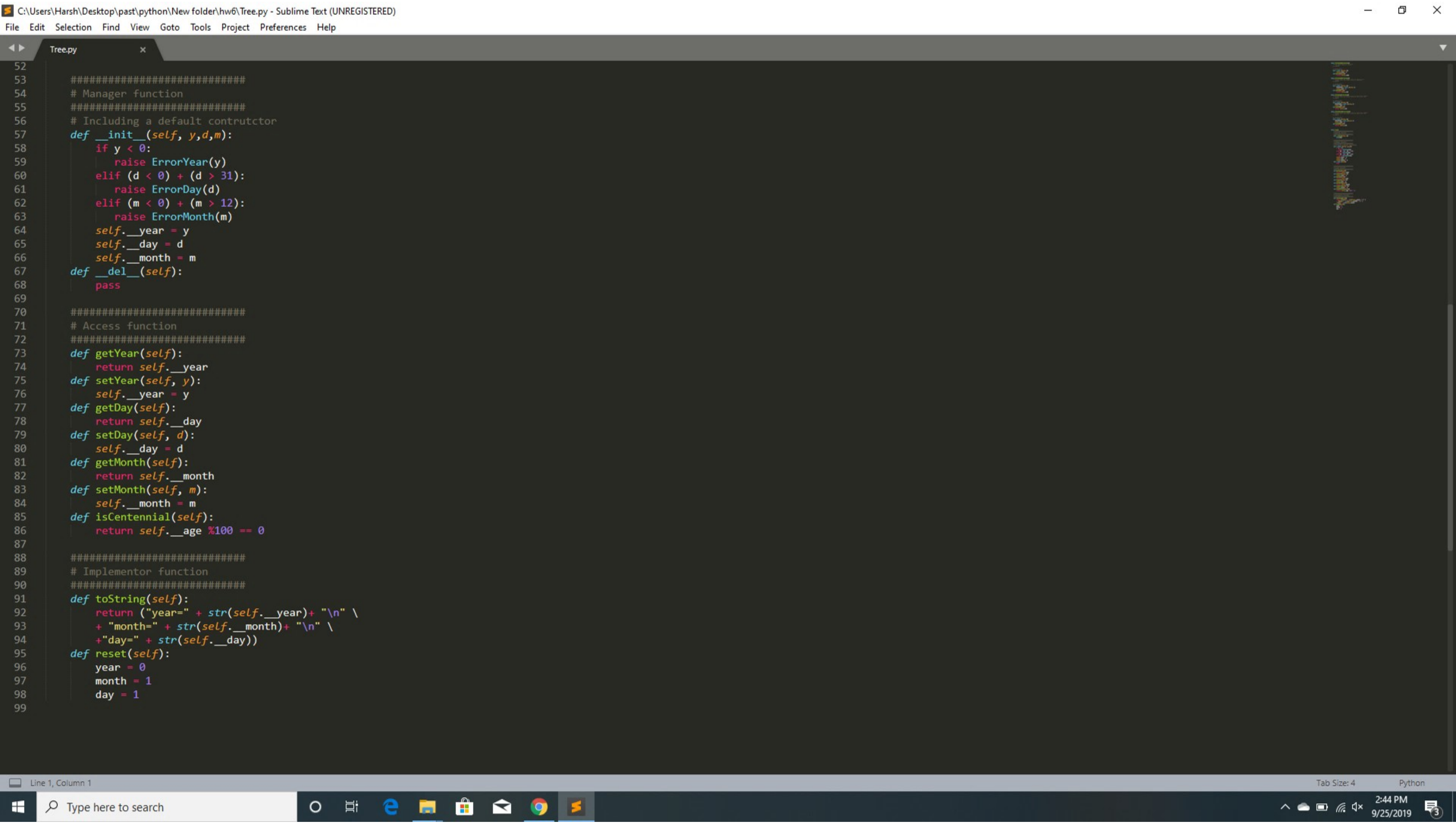
```

class ErrorCode(Exception):
   """The base class of erros"""
   #__code=0

   # constructor
   def __init__(self, n):
        self.__code = n
   def getCode(self):
        return self.__code

class ErrorYear(ErrorCode):
   """Raised when the input value is Negative"""
   #__num=0

   # constructor
   def __init__(self, n):
        ErrorCode.__init__(self, 1)
        self.__num = n
   def getNum(self):
        return self.__num

class ErrorDay(ErrorCode):
   """Raised when the input value is more than 130"""
   #__num=0

   # constructor
   def __init__(self, n):
      ErrorCode.__init__(self, 2)
      self.__num = n
   def getNum(self):
      return self.__num

class ErrorMonth(ErrorCode):
   """Raised when the input value is more than 130"""
   #__num=0

   # constructor
   def __init__(self, n):
      ErrorCode.__init__(self, 3)
      self.__num = n
   def getNum(self):
      return self.__num


class Tree:
    ############################
    # Helping function
    ############################
    def __trace(self, s):
        print(s)

```



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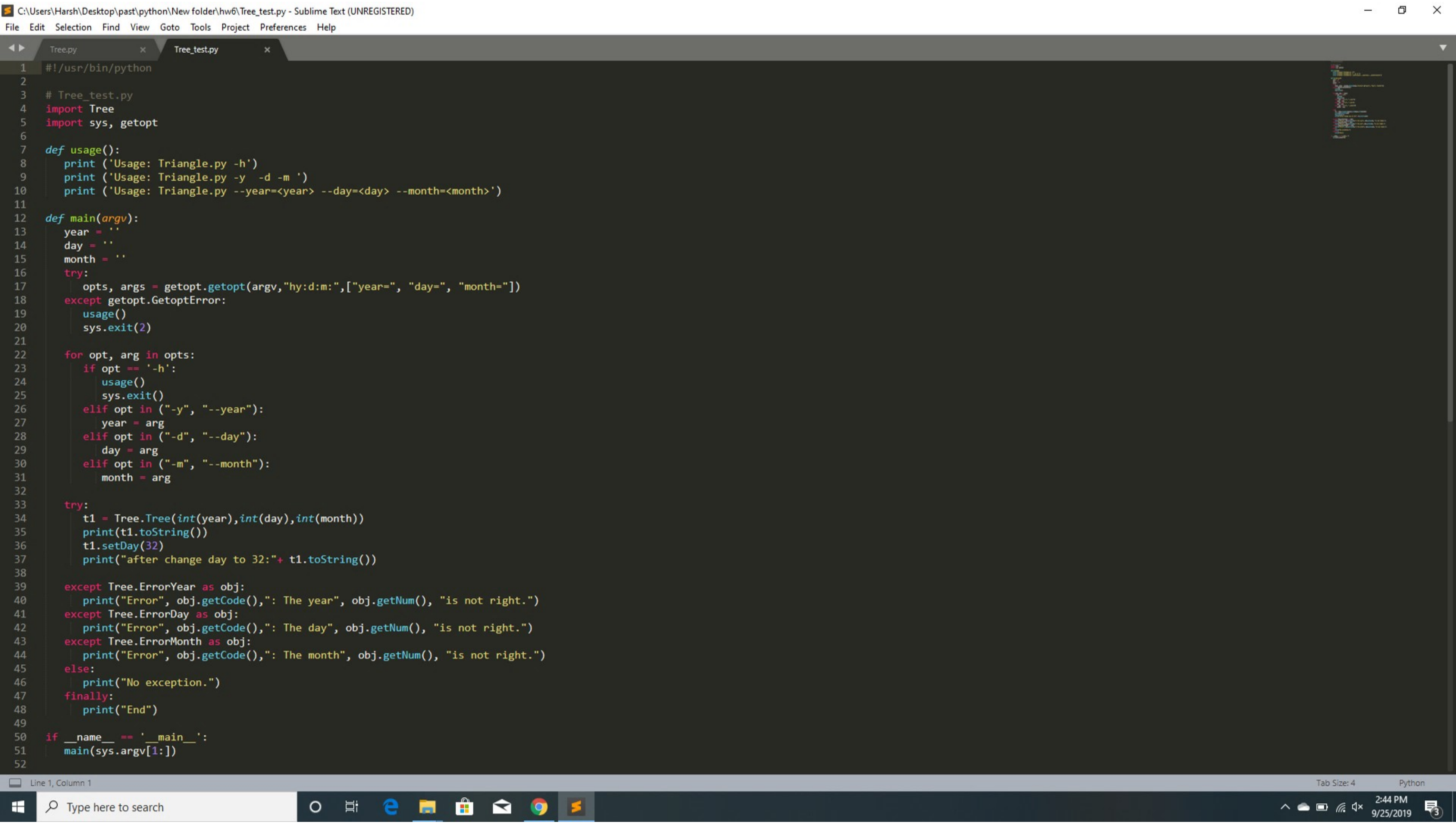
```python

    ############################
    # Manager function
    ############################
    # Including a default contrutctor
    def __init__(self, y,d,m):
        if y < 0:
           raise ErrorYear(y)
        elif (d < 0) + (d > 31):
           raise ErrorDay(d)
        elif (m < 0) + (m > 12):
           raise ErrorMonth(m)
        self.__year = y
        self.__day = d
        self.__month = m
    def __del__(self):
        pass

    ############################
    # Access function
    ############################
    def getYear(self):
        return self.__year
    def setYear(self, y):
        self.__year = y
    def getDay(self):
        return self.__day
    def setDay(self, d):
        self.__day = d
    def getMonth(self):
        return self.__month
    def setMonth(self, m):
        self.__month = m
    def isCentennial(self):
        return self.__age %100 == 0

    ############################
    # Implementor function
    ############################
    def toString(self):
        return ("year=" + str(self.__year)+ "\n" \
        + "month=" + str(self.__month)+ "\n" \
        +"day=" + str(self.__day))
    def reset(self):
        year = 0
        month = 1
        day = 1

```

Line 1, Column 1   Tab Size: 4   Python


C:\Users\Harsh\Desktop\past\python\New folder\hw6\Tree_test.py - Sublime Text (UNREGISTERED)
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Tree.py
Tree_test.py
Line 1, Column 1
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Python
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9/25/2019

```python
#!/usr/bin/python

# Tree_test.py
import Tree
import sys, getopt

def usage():
    print ('Usage: Triangle.py -h')
    print ('Usage: Triangle.py -y  -d -m ')
    print ('Usage: Triangle.py --year=<year> --day=<day> --month=<month>')

def main(argv):
    year = ''
    day = ''
    month = ''
    try:
        opts, args = getopt.getopt(argv,"hy:d:m:",["year=", "day=", "month="])
    except getopt.GetoptError:
        usage()
        sys.exit(2)

    for opt, arg in opts:
        if opt == '-h':
            usage()
            sys.exit()
        elif opt in ("-y", "--year"):
            year = arg
        elif opt in ("-d", "--day"):
            day = arg
        elif opt in ("-m", "--month"):
            month = arg

    try:
        t1 = Tree.Tree(int(year),int(day),int(month))
        print(t1.toString())
        t1.setDay(32)
        print("after change day to 32:"+ t1.toString())

    except Tree.ErrorYear as obj:
        print("Error", obj.getCode(),": The year", obj.getNum(), "is not right.")
    except Tree.ErrorDay as obj:
        print("Error", obj.getCode(),": The day", obj.getNum(), "is not right.")
    except Tree.ErrorMonth as obj:
        print("Error", obj.getCode(),": The month", obj.getNum(), "is not right.")
    else:
        print("No exception.")
    finally:
        print("End")

if __name__ == '__main__':
    main(sys.argv[1:])
```