

Unit 2 Object Oriented Analysis - Initial Steps towards Programming in Python

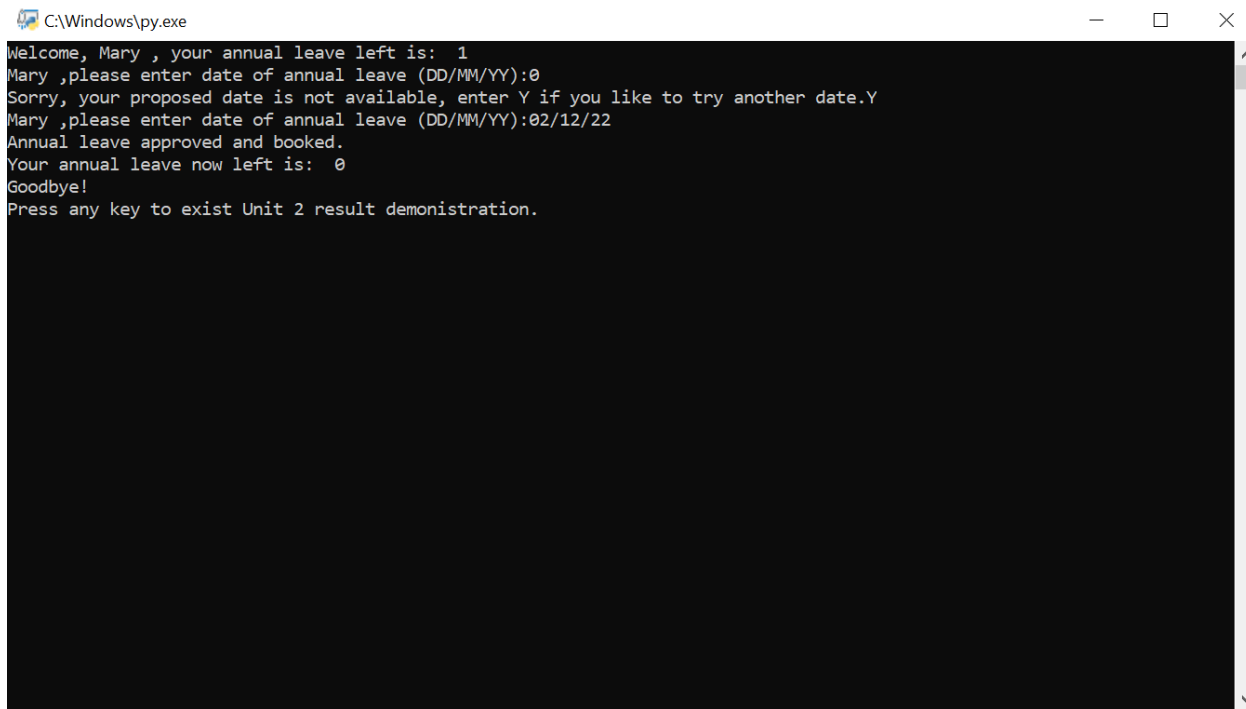
Optional extension activities

Write a Python program to achieve basic employee-related functionality which includes retaining employee details and allowing an employee to book a day of annual leave. Extend the Python program you have now created to use protected and unprotected variables. Remember to record your findings in your e-portfolio.

Notes to reader:

This exercise related to an employee-related function. The program firstly displays the number of annual leave left for the employee. Then it allows the staff to book a annual leave date. Thereafter the total number of annual leave is deducted after booking. Result is demonstrated as follows. The source code is set out in a separate file and if anyone is interested please refer to it.

result



```
C:\Windows\py.exe
Welcome, Mary , your annual leave left is: 1
Mary ,please enter date of annual leave (DD/MM/YY):0
Sorry, your proposed date is not available, enter Y if you like to try another date.Y
Mary ,please enter date of annual leave (DD/MM/YY):02/12/22
Annual leave approved and booked.
Your annual leave now left is: 0
Goodbye!
Press any key to exist Unit 2 result demonstration.
```

program

```
# creating class
class STAFF:
    def __init__(self, name, age, post, salary):
        self._name = name
        self._age = age
        self._post = post
        self._salary = salary

class ANNUALCAL(STAFF):
    def __init__(self, name, age, post, salary):
        STAFF.__init__(self, name, age, post, salary)

#Assume there are several days available for annual leave:
D1 = "02/12/22"
D2 = "03/12/22"
D3 = "04/12/22"
X = True

def ALS(s):
    While x = True:
        DD = input("please enter date of annual leave (DD/MM/YY):")
        If DD ==D1 or DD == D2 or DD = D3;
            print ("Annual leave approved and booked")
            X = False
        else:
            DX = input("Sorry, your proposed date is not available, enter "Y" if you like to try another date.")
            If DX = "Y":
                continue
            else:
                break

P1 =("mary",20,"clerk",10000)
ALS(P1)
```