This homework assignment is based on Chapter 10 Classes.

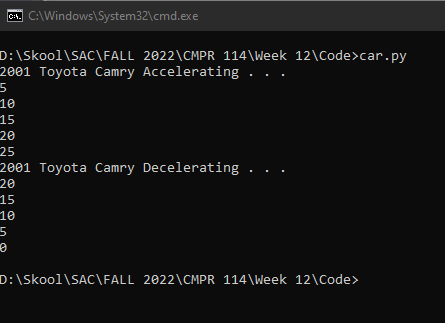
**There are two projects, each worth 50%**

Project #1

Text

Description automatically generated

**#1 print screen the output and the code from all classes below here.**



class Car(object):

def \_\_init\_\_(self, year, make):

self.\_\_year = year

self.\_\_make = make

self.\_\_speed = 0

def accelerate(self):

#Accelerate car.

self.\_\_speed += 5

def brake(self):

#Decelerate car.

self.\_\_speed -= 5

def get\_speed(self):

#Get current speed of car.

return self.\_\_speed

def main():

# create a Car object

car = Car("2001", "Toyota Camry")

# calls the accelerate method

print ("Accelerating . . .")

for i in range(5):

car.accelerate()

print (car.get\_speed())

# calls the brake method five times.

print ("Decelerating . . .")

for i in range(5):

car.brake()

print (car.get\_speed())

if \_\_name\_\_ == "\_\_main\_\_":

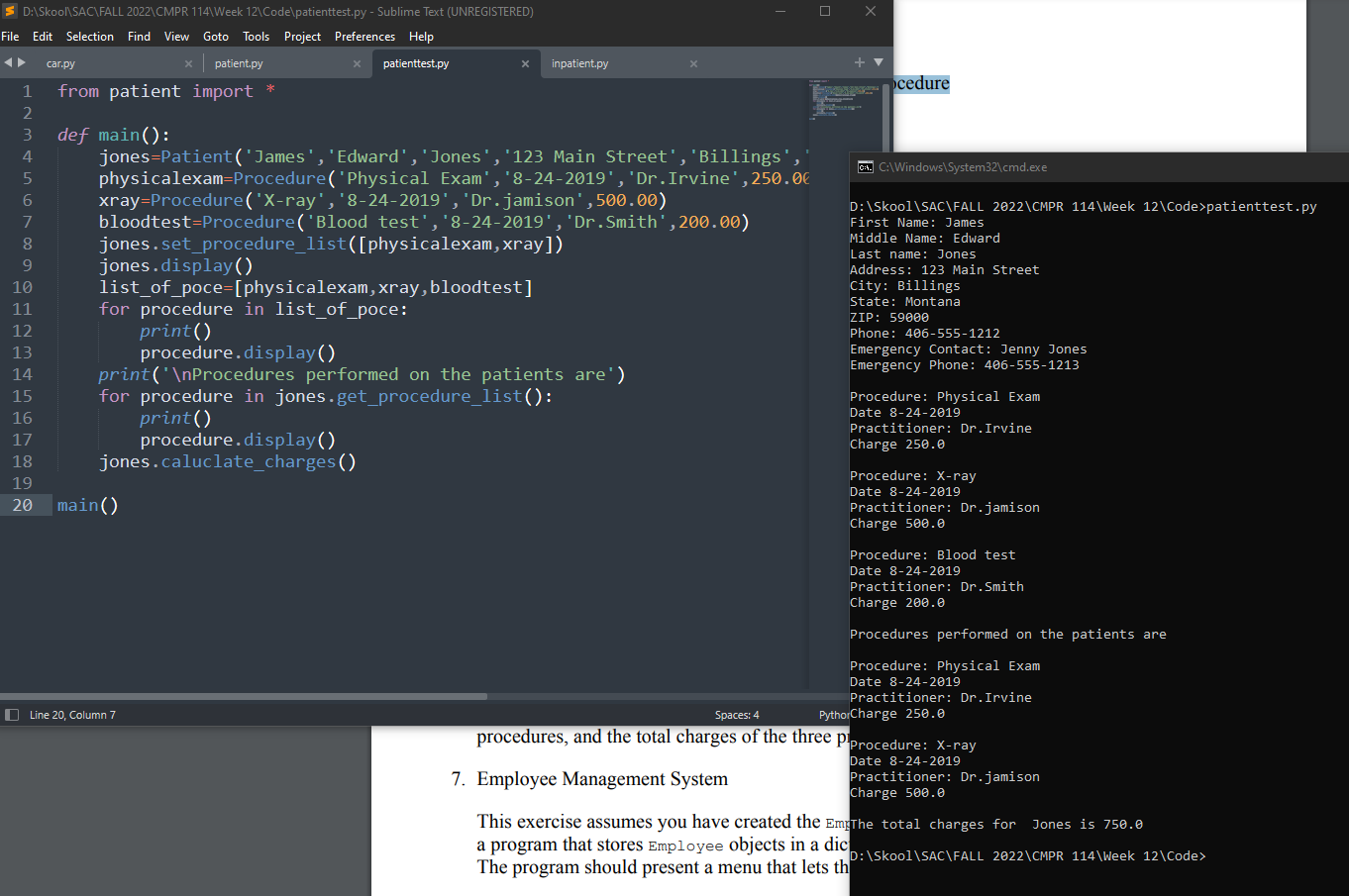
main()

Project #2

Text

Description automatically generated with medium confidence

**#2 print screen the output and the code from all classes below here.**

from patient import \*

def main():

jones=Patient('James','Edward','Jones','123 Main Street','Billings','Montana',59000,'406-555-1212','Jenny Jones','406-555-1213')

physicalexam=Procedure('Physical Exam','8-24-2019','Dr.Irvine',250.00)

xray=Procedure('X-ray','8-24-2019','Dr.jamison',500.00)

bloodtest=Procedure('Blood test','8-24-2019','Dr.Smith',200.00)

jones.set\_procedure\_list([physicalexam,xray])

jones.display()

list\_of\_poce=[physicalexam,xray,bloodtest]

for procedure in list\_of\_poce:

print()

procedure.display()

print('\nProcedures performed on the patients are')

for procedure in jones.get\_procedure\_list():

print()

procedure.display()

jones.caluclate\_charges()

main()

from patient import \*

class InPatient(Patient):

def \_\_init\_\_(self,fname,mname,lname,adress,city,state,zipcode,phnum,emname,emphnum,days\_in):

super().\_\_init\_\_(fname,mname,lname,adress,city,state,zipcode,phnum,emname,emphnum)

self.days\_in=days\_in

def set\_days(self,days):

self.days\_in=days

def show(self):

self.display()

print('Days:',self.days\_in)

print("The total charge for",self.last\_name, "is $",self.days\_in\*50)

def main():

smith=InPatient('Will','Thomas','Smith','456 South Street','Dallas','Texas',75050,'214-555-1234','Carol Smith','214-555-4567',3)

smith.show()

main()

import datetime

class Patient:

def \_\_init\_\_(self,fname,mname,lname,adress,city,state,zipcode,phnum,emname,emphnum):

self.first\_name=fname

self.middle\_name=mname

self.last\_name=lname

self.adress=adress

self.city=city

self.state=state

self.zipcode=zipcode

self.phone\_number=phnum

self.emergency\_name=emname

self.emergency\_phone\_number=emphnum

self.procedure\_list=[]

def get\_first\_name(self):

return self.first\_name

def get\_middle\_name(self):

return self.middle\_name

def get\_last\_name(self):

return self.last\_name

def get\_adress(self):

return self.adress

def get\_city(self):

return self.city

def get\_state(self):

return self.state

def get\_zipcode(self):

return self.zipcode

def get\_phone\_number(self):

return self.phone\_number

def get\_emergency\_name(self):

return self.emargency\_name

def get\_emergency\_phone\_number(self):

return self.emergency\_phone\_number

def get\_procedure\_list(self):

return self.procedure\_list

def set\_first\_name(self,first\_name):

self.first\_name=first\_name

def set\_middle\_name(self,middle\_name):

self.middle\_name=middle\_name

def set\_last\_name(self,last\_name):

self.last\_name=last\_name

def set\_adress(self,adress):

self.adress=adress

def set\_city(self,city):

self.city

def set\_state(self,state):

self.state=state

def set\_zipcode(self,zipcode):

self.zipcode=zipcode

def set\_phone\_number(self,phone\_number):

self.phone\_number=phone\_number

def set\_emergency\_name(self,emargency\_name):

self.emargency\_name=emargency\_name

def set\_emergency\_phone\_number(self,emergency\_phone\_number):

self.emergency\_phone\_number=emergency\_phone\_number

def set\_procedure\_list(self,procedure\_list):

self.procedure\_list=procedure\_list

def caluclate\_charges(self):

total\_charges=0

for procedure in self.procedure\_list:

total\_charges=total\_charges+procedure.get\_charges()

print('\nThe total charges for ',self.last\_name,'is',total\_charges)

def display(self):

print('First Name:',self.first\_name)

print('Middle Name:',self.middle\_name)

print('Last name:',self.last\_name)

print('Address:',self.adress)

print('City:',self.city)

print('State:',self.state)

print('ZIP:',self.zipcode)

print('Phone:',self.phone\_number)

print('Emergency Contact:',self.emergency\_name)

print('Emergency Phone:',self.emergency\_phone\_number)

class Procedure:

def \_\_init\_\_(self,procedure\_name,date,practitioner\_name,charges):

self.procedure\_name=procedure\_name

self.date=date

self.practitioner\_name=practitioner\_name

self.charges=charges

def get\_procedure\_name(self):

return self.procedure\_name

def get\_date(self):

return self.date

def get\_practitioner\_name(self):

return self.practitioner\_name

def get\_charges(self):

return self.charges

def set\_procedure\_name(self,procedure\_name):

self.procedure\_name=procedure\_name

def set\_date(self,date):

self.date=date

def set\_practitioner\_name(self,practitioner\_name):

self.practitioner\_name=practitioner\_name

def set\_charges(self,charges):

self.charges=charges

def display(self):

print('Procedure:',self.procedure\_name)

print('Date',self.date)

print('Practitioner:',self.practitioner\_name)

print('Charge',self.charges)

**Submit this document to Module 12 Homework.**