1. Question

"""

write a program to define student class,

which contains student name,student roll numbers are class variables,

initialize the class variable values in the constructor.

display the details in display() method

case=1

input=

enter name:mounica

enter roll number:18bd1a0552

output=

Student name: mounica

Student roll number: 18bd1a0552

case=2

input=

enter name:lalitha

enter roll number:18bd1a1249

output=

Student name: lalitha

Student roll number: 18bd1a1249

"""

Code:

class student:

name=""

roll=""

def \_\_init\_\_(self,n,r):

self.name=n

self.roll=r

def display(self):

print("Student name:",self.name)

print("Student roll number:",self.roll)

n=input("enter name:")

r=input("enter roll number:")

stu=student(n,r)

stu.display()

1. Question

"""

write a program to define factorial class,

which contains number as class variable,

initialize the class variable values in the constructor.

find the factorial of the number in fact() method and display the result

case=1

input=

enter number:5

output=

factorial of 5 is 120

case=2

input=

enter number:7

output=

factorial of 7 is 5040

"""

class factorial:

num=0

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

#write the code to initialize class variable

def fact(self):

#write logic to find factorial of given numbe

#write the code to display the result

n1 = int(input("enter number:"))

#write the code to create a instance for the class and call fact() method

CODE:

class factorial:

num=0

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

self.num=n

def fact(self):

f=1

for i in range(2,self.num+1):

f=f\*i

print("factorial of %d is %d"%(self.num,f))

n = int(input("enter number:"))

f1=factorial(n)

f1.fact()

1. Question

"""

write a program to define Employee class,

which contains employee name, employee id and basic salary as class variables,

initialize the class variable values in the constructor.

find the gross salary of the employee using gross\_salary() method

display the details of employee with gross salary using display() method

consider,

gross salary = basic salary + HRA + DA

HRA = 10% of basic salary

DA = 30% of basic salary

case=1

input=

enter name:ramu

enter id:101

enter basic salary:20000

output=

Employee name: ramu

Employee id: 101

Employee gross salary: 28000.0

case=2

input=

enter name:ramesh

enter id:102

enter basic salary:30000

output=

Employee name: ramesh

Employee id: 102

Employee gross salary: 42000.0

"""

Code:

class Employee:

e\_name=""

e\_id=0

e\_bs=0

e\_gs=0

def \_\_init\_\_(self, name, eid, bs):

self.e\_name=name

self.e\_id=eid

self.e\_bs=bs

def gross\_salary(self):

self.e\_gs = self.e\_bs + 0.1\*self.e\_bs + 0.3\*self.e\_bs

def display(self):

print("Employee name:",self.e\_name)

print("Employee id:",self.e\_id)

print("Employee gross salary:",self.e\_gs)

name = input("enter name:")

eid = int(input("enter id:"))

bs = int(input("enter basic salary:"))

emp=Employee(name,eid,bs)

emp.gross\_salary()

emp.display()