**LAB 11**

**TASK 1**

**﻿**from abc import ABC,abstractmethod

class Employee(ABC):

def \_\_init\_\_(self, name, CNIC):

self.\_\_name = name

self.\_\_CNIC = CNIC

@abstractmethod

def monthly\_earnings(self):

pass

def get\_details(self):

return self.\_\_name, "and", self.\_\_CNIC

def get\_cnic(self):

return self.\_\_CNIC

class SalariedEmployee(Employee):

def \_\_init\_\_(self, weeklySalary, name, CNIC):

super(). \_\_init\_\_(name, CNIC)

self.\_\_weeklySalary = weeklySalary

def monthly\_earnings(self):

return 4 \* self.\_\_weeklySalary

def get\_details(self):

return super().get\_details(), "and", self.monthly\_earnings()

class HourlyEmployee(Employee):

def \_\_init\_\_(self, wage, hours, name, CNIC):

super(). \_\_init\_\_(name, CNIC)

self.\_\_wage = wage

self.\_\_hours = hours

def monthly\_earnings(self):

if self.\_\_hours > 40:

a = (self.\_\_hours - 40)\*1.5

b = a \* self.\_\_wage

c = b + (self.\_\_wage \* 40)

return c

else:

return self.\_\_wage \* self.\_\_hours

def get\_details(self):

return super().get\_details(), "and", self.monthly\_earnings()

def main():

Employee\_register = []

A = 0

while A!=5:

A = eval(input("Add employee(1) \n show employee details(2) \n terminate employee(3) \n show employee register(4) \n to exit application(5)"))

def add\_employee(k):

if k == 1:

x = int(input("weekly salary of employee : "))

y = str(input("name : "))

z = str(input("CNIC : "))

c = SalariedEmployee(x,y,z)

elif k == 0:

r = int(input("enter wage : "))

s = int(input("enter hours : "))

t = str(input("name : "))

u = str(input("CNIC : "))

c = HourlyEmployee(r,s,t,u)

Employee\_register.append(c)

def employee\_details(cnic):

for i in Employee\_register:

if cnic == i.get\_cnic():

print(i.get\_details())

else:

print("not in the register")

def terminate\_employee(cnic):

for i in Employee\_register:

if cnic == i.get\_cnic():

Employee\_register.remove(i)

else:

print("not in the register")

def display\_emloyee\_register():

for i in Employee\_register:

employee\_details(i.get\_cnic())

if A == 1:

k = eval(input("enter type of employee : for salaried press 1 and for hourly press 0 : "))

add\_employee(k)

elif A == 2:

cnic = input("Enter CNIC number : ")

employee\_details(cnic)

elif A == 3:

cnic = eval(input("Enter CNIC number : "))

terminate\_employee(cnic)

elif A == 4:

display\_emloyee\_register()

elif A == 5:

break

main()