

NEURAL NETWORKS ASSIGNMENT 3

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Question-1

```
In [2]: class Employee:
    def __init__(self): #constructor for name,family,salary and Department.
        self.name ="akhil "
        self.family =6
        self.salary=98665
        self.department="civil"
    def __init__(self,name,family,salary,department):
        self.name =name
        self.family =family
        self.salary=salary
        self.department=department

    def count_emp(self,emp1,fullemp1):
        print("The total Number of Employees(employee+Fulltime employee):",len(emp1+fullemp1)) #counting number of employees.

    def avg_salary(self,emp1,fullemp1): #calculating the average salaryof all employees.
        su=0
        for i in emp1:
            su=su+i.salary
        for i in fullemp1:
```

```
            print("the average salary of the all the Employees(employee+Fulltime employee):",su/2)

class Fulltime_Employee(Employee):
    pass
n=int(input("enter number of employees"))
pe=[]
for i in range(0,n):
    na=input("enter name")
    f=int(input("enter how many family members"))
    s=int(input("enter salary"))
    d=input("enter department")
    obj=Employee(na,f,s,d)
    pe.append(obj)
full=int(input("enter Full time employees"))
fe=[]
for i in range(0,full):
    na=input("enter name")
    f=int(input("enter how many family members"))
    s=int(input("enter salary"))
    d=inout("enter department")
```

Output:

```
enter number of employees4
enter nameakhil
enter how many family members4
enter salary9890
enter departmentcivil
enter namejyo
enter how many family members3
enter salary8970
enter departmentIT
enter namenishu
enter how many family members2
enter salary6789
enter departmentECE
enter namevijju
enter how many family members5
enter salary9000
enter departmentcse
enter Full time employees2
enter namearha
enter how many family members4
```

```

enter salary8900
enter departmentIT
enter nameayan
enter how many family members5
enter salary7000
enter departmentcse
The total Number of Employees(employee+Fulltime employee): 6
the average salary of the all the Employees(employee+Fulltime employee): 25274.5

```

Question-2

```

import numpy as np #import numpy
x = np.arange(1,21,dtype=float) #vector of size 1-20
print("Vector :",x)
x=x.reshape(4,5)
print("Then reshape the array to 4 by 5:",x)
def replace(x):
    a=x
    a[:,np.argmax(x, axis=1)] = 0
    return a
result= replace(x)
print("replace the max in each row by 0 (axis=1):",result)

Vector : [ 1.  2.  3.  4.  5.  6.  7.  8.  9. 10. 11. 12. 13. 14. 15. 16. 17. 18.
 19. 20.]
Then reshape the array to 4 by 5: [[ 1.  2.  3.  4.  5.]
 [ 6.  7.  8.  9. 10.]
 [11. 12. 13. 14. 15.]
 [16. 17. 18. 19. 20.]]
replace the max in each row by 0 (axis=1): [[ 1.  2.  3.  4.  0.]
 [ 6.  7.  8.  9.  0.]
 [11. 12. 13. 14.  0.]
 [16. 17. 18. 19.  0.]]

```

Vedio link:

https://drive.google.com/file/d/1M396gpOoRuHFzB8cpqd95QPcbrnvrNFL/view?usp=drive_link