ASSIGNMENT 1A

Program:

```
f=open("/content/emp.csv","r")
contents=f.read()
lines=contents.split("\n")
eid=[]; nm=[]; desgn=[]; sal=[];

for l in lines:
  words=l.split(",")
  print(words)
  eid.append(int(words[0]))
  nm.append(words[1])
  desgn.append(words[2])
  sal.append(int(words[3]))

print("Employee IDs",eid)
print("Employee Names",nm)
print("Employee Designations",desgn)
print("Employee Salary",sal)

#Max Salary
print("Maximum Salary:",max(sal))
#Min Salary
print("Minimum Salary:",min(sal))
#Average Salary
print("Average Salary:",sum(sal)/len(sal))
#Total Salary
print("Total Salary:",sum(sal))

#Employe whose salary is max
print("\nEmployee name whose salary is
maximum",nm[sal.index(max(sal))])

#Employe whose desgination is manager
print("\nEmployee name whose designation is manager",end=",")
for i in range(len(desgn)):
  if desgn[i]=="Manager" or desgn[i]== "manager":
    print(nm[i],end=" ")

#Employe whose salary is 100000
print("\nEmployee name whose salary is 100000",nm[sal.index(100000)])

#Employe whose salary is min
print("\nEmployee name whose salary is
minimum",nm[sal.index(min(sal))])

#Employe whose desgination is Sr.Manager
```

```
print("\nEmployee name whose designation is Sr.Manager",end=",")
for i in range(len(desgn)):
  if desgn[i]=="Sr.Manager" or desgn[i]== "Sr.manager":
    print(nm[i],end=" ")

f=0
#Employe whose salary is 50000
print("\nEmployee name whose designation is Sr.Manager",end=",")
for i in range(len(sal)):
  if sal[i]==50000:
   print("\nEmployee name whose salary is 50000",nm[i])
   f=1

if(f==0):
  print("\nNo any Employee present whose salary is 50000")
```

Output:

```
['1', 'Sanvi', 'Manager', '100000']
['2', 'Mrunmayee', 'Sr.Manager', '95000']
['3', 'Jayesh', 'Manager', '80000']
['4', 'Gouri', 'Sr.Manager', '95000']
['5', 'Mahesh', 'Supervisor', '500000']
Employee IDs [1, 2, 3, 4, 5]
Employee Names ['Sanvi', 'Mrunmayee', 'Jayesh', 'Gouri', 'Mahesh']
Employee Designations ['Manager', 'Sr.Manager', 'Manager', 'Sr.Manager', 'Supervisor']
Employee Salary [100000, 95000, 80000, 95000, 500000]
Maximum Salary: 500000
Minimum Salary: 80000
Average Salary: 174000.0
Total Salary: 870000

Employee name whose salary is maximum Mahesh

Employee name whose designation is manager,Sanvi Jayesh
Employee name whose salary is 100000 Sanvi

Employee name whose salary is minimum Jayesh

Employee name whose designation is Sr.Manager,Mrunmayee Gouri
Employee name whose designation is Sr.Manager,
No any Employee present whose salary is 50000
```

ASSIGNMENT 1B

Program:

```
f1=open("/emp.csv","r")
f2=open("/sal1.csv","r")
f3=open("/emp_sal.csv","w")
contents1=f1.read()
contents2=f2.read()
print(contents1)
print(contents2)
nm=[]
sal=[]
lines1=contents1.split("\n")
lines2=contents2.split("\n")
print(lines1)
for l1 in lines1:
  words1=l1.split(",")
  print(words1)
  print(l1)

  for l2 in lines2:
    words2=l2.split(",")
    if(words1[0] == words2[0]):
       l1 = l1 + "," + words2[1] + ","  + words2[2] + "\n"
       f3.write(l1)

       nm.append(words1[1])
       sal.append(int(words2[2]))
       print(l1)

f1.close()
f2.close()
f3.close()

print(nm)
print(sal)
```

Output:

```
1,Sanvi,Pune
2,Mrunmayee,Pune
3,Jayesh,Nashik
4,Gouri,Nashik
5,Mahesh,Pune

1,Manager,100000
2,Sr. Manager,95000
```

```
3,Manager,80000
4,Sr. Manager,95000
5,Supervisor,500000

['1,Sanvi,Pune', '2,Mrunmayee,Pune', '3,Jayesh,Nashik',
'4,Gouri,Nashik', '5,Mahesh,Pune', '']
['1', 'Sanvi', 'Pune']
1,Sanvi,Pune
1,Sanvi,Pune,Manager,100000

['2', 'Mrunmayee', 'Pune']
2,Mrunmayee,Pune
2,Mrunmayee,Pune,Sr. Manager,95000

['3', 'Jayesh', 'Nashik']
3,Jayesh,Nashik
3,Jayesh,Nashik,Manager,80000

['4', 'Gouri', 'Nashik']
4,Gouri,Nashik
4,Gouri,Nashik,Sr. Manager,95000

['5', 'Mahesh', 'Pune']
5,Mahesh,Pune
5,Mahesh,Pune,Supervisor,500000

['']
```

Program:

```
import csv
def top_5_emp(d3):
  d3.sort(key=lambda x:int(x[5]),reverse=True)
  print("Sorted Data:",d3)

  print("\n\n Top1 Employee",d3[0][1],d3[0][5])
  print("Top2 Employee",d3[1][1],d3[1][5])
  print("Top3 Employee",d3[2][1],d3[2][5])
  print("Top4 Employee",d3[3][1],d3[3][5])
  print("Top5 Employee",d3[4][1],d3[4][5])

f1=open("/content/emp.csv","r")
f2=open("/content/sal.csv","r")
f3=open("/content/emp_sal.csv","w")

d1=list(csv.reader(f1,delimiter=','))
d2=list(csv.reader(f2,delimiter=','))

print("\n\nFile1 contents:",d1)
print("\n\nFile2 contents:",d2)
d3=[]
for i in range (len(d1)):
  d3.append(d1[i]+d2[i])
```

```
print(d3)
cw=csv.writer(f3)
cw.writerows(d3)

top_5_emp(d3)

f1.close()
f2.close()
f3.close()
```

Output:

File1 contents: [['1', 'Sanvi', 'Pune'], ['2', 'Mrunmayee', 'Pune'], ['3', 'Jayesh', 'Nashik'], ['4', 'Gouri', 'Nashik'], ['5', 'Mahesh', 'Pune']]

File2 contents: [['1', 'Manager', '100000'], ['2', 'Sr. Manager', '95000'], ['3', 'Manager', '80000'], ['4', 'Sr. Manager', '95000'], ['5', 'Supervisor', '500000']]
[['1', 'Sanvi', 'Pune', '1', 'Manager', '100000'], ['2', 'Mrunmayee', 'Pune', '2', 'Sr. Manager', '95000'], ['3', 'Jayesh', 'Nashik', '3', 'Manager', '80000'], ['4', 'Gouri', 'Nashik', '4', 'Sr. Manager', '95000'], ['5', 'Mahesh', 'Pune', '5', 'Supervisor', '500000']]
Sorted Data: [['5', 'Mahesh', 'Pune', '5', 'Supervisor', '500000'], ['1', 'Sanvi', 'Pune', '1', 'Manager', '100000'], ['2', 'Mrunmayee', 'Pune', '2', 'Sr. Manager', '95000'], ['4', 'Gouri', 'Nashik', '4', 'Sr. Manager', '95000'], ['3', 'Jayesh', 'Nashik', '3', 'Manager', '80000']]

Top1 Employee Mahesh 500000
Top2 Employee Sanvi 100000
Top3 Employee Mrunmayee 95000
Top4 Employee Gouri 95000
Top5 Employee Jayesh 80000

ASSIGNMENT 1C

Program:

```
import datetime
import csv
f=open("/content/empbirth.csv","r")
data=list(csv.reader(f))
print(data)

from datetime import date
def calculateAge(birthdate):
  today=date.today()
  age=today.year-birthdate.year-
((today.month,today.day)<(birthdate.month,birthdate.day))
  return age

bdate=[]
age=[]
dollars=[]

for i in range(len(data)):
  print(data[i][1])

  bdate.append(datetime.datetime.strptime(data[i][3],'%d-%m-
%Y').date())
  print("bithdate=",bdate)

for i in range(len(data)):
  age.append(calculateAge(bdate[i]))
  dollars.append((float(data[i][4]))/82)

print("Age=",age)
print("salary=",dollars)
```

Output:

```
[['1', 'Sanvi', 'Nashik', '6-3-2004', '1000'], ['2', 'Gouri', 'Pune', '12-1-2004', '500'], ['3', 'Rajesh',
'Sambhajinagar', '13-12-2005', '300'], ['4', 'Omkar', 'Goa', '4-6-2002', '100'], ['5', 'Vidhi', 'Surat', '6-12-
2005', '400']]
Sanvi
bithdate= [datetime.date(2004, 3, 6)]
Gouri
bithdate= [datetime.date(2004, 3, 6), datetime.date(2004, 1, 12)]
Rajesh
bithdate= [datetime.date(2004, 3, 6), datetime.date(2004, 1, 12), datetime.date(2005, 12, 13)]
Omkar
bithdate= [datetime.date(2004, 3, 6), datetime.date(2004, 1, 12), datetime.date(2005, 12, 13),
datetime.date(2002, 6, 4)]
Vidhi
```

```
bithdate= [datetime.date(2004, 3, 6), datetime.date(2004, 1, 12), datetime.date(2005, 12, 13),
datetime.date(2002, 6, 4), datetime.date(2005, 12, 6)]
Age= [19, 19, 17, 20, 17]
salary= [12.195121951219512, 6.097560975609756, 3.658536585365854, 1.2195121951219512,
4.878048780487805]
```