ASSIGNMENT-1

B4 BATCH **ROLL NO:267**

PROBLEM STATEMENT:

Take/Prepare any text files for any real-life application. For Ex. “Stud.txt”, “Placement.csv” and “Result. csv” files for result Analysis. Combine into “StudentDetails.csv”. Perform all statistical analysis (Average, Max, Min, Count, Sum, Percentage) on it

LINK:

https://colab.research.google.com/drive/18TSkq5wO-Yd6CjlBRexDenF_1QdWjN05?usp=sharing

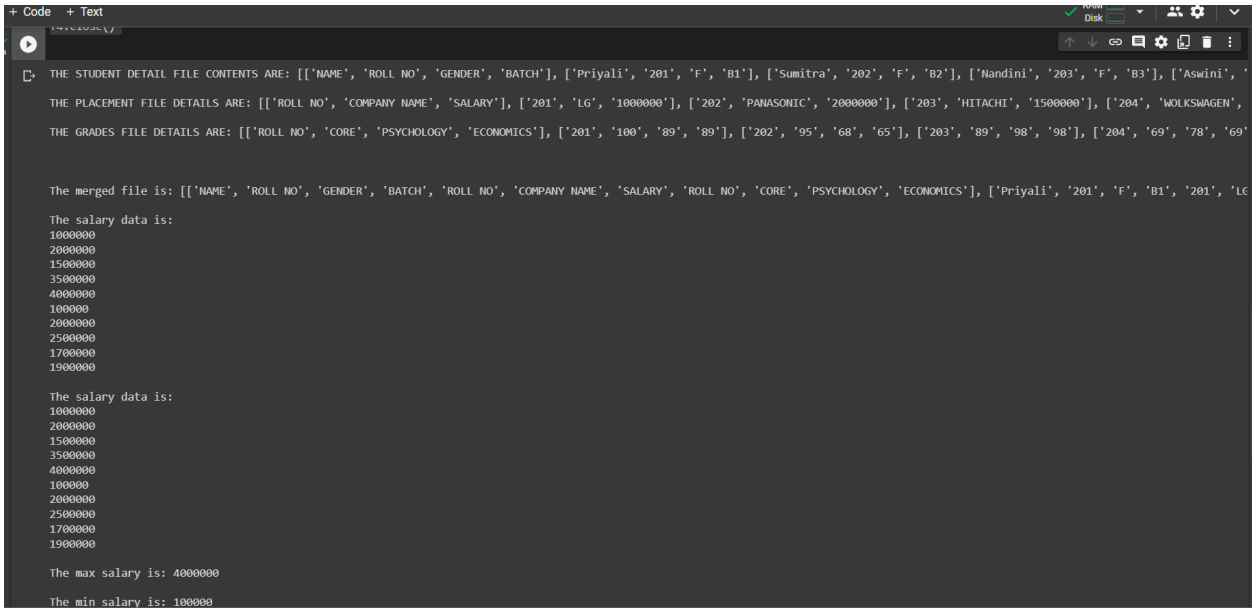
CODE:

```
import csv
f1=open("/content/STUDENTDETAILS.csv",'r')
f2=open("/content/PLACEMENT.csv",'r')
f3=open("/content/GRADES111.csv",'r')
f4=open("/content/FINAL.csv",'w')

#reading the files
data1=list(csv.reader(f1, delimiter=','))
data2=list(csv.reader(f2, delimiter=','))
data3=list(csv.reader(f3, delimiter=','))

#printing the file contents
print("THE STUDENT DETAIL FILE CONTENTS ARE:",data1,"\n")
print("THE PLACEMENT FILE DETAILS ARE:",data2,"\n")
print("THE GRADES FILE DETAILS ARE:",data3,"\n")

#merging files
data4=[]
for i in range(len(data1)):
   data4.append(data1[i]+data2[i]+data3[i])
   cf4=csv.writer(f4)
   cf4.writerows(data4)
print ("\n\nThe merged file is:",data4)
```

```
#extracting and printing salary data
SALARY=[]
for i in range(1,len(data2)):
   SALARY.append(int(data2[i][2]))
print("\nThe salary data is:")
for i in SALARY:
   print(i)

#extracting and printing grades data
GRADES=[]
for i in range(1,len(data3)):
   GRADES.append(int(data3[i][1]))
print("\nThe salary data is:")
for i in SALARY:
   print(i)

#max and min salary and salary
print("\nThe max salary is:",max(SALARY))
print("\nThe min salary is:",min(SALARY))
print("\nThe highest grade is:",max(GRADES))
print("\nThe lowest grade is:",min(GRADES))


#avg salary
sum=0
for i in SALARY:
   sum=sum+i
print("The average salary is:",sum/len(SALARY))

#function to display top 5 salaries in the file
def top5sal(data4):
   data4.sort(key=lambda x: x[5], reverse=True)
   print("\nTop 5 salary records are:")
   for i in range(5):
      print(data4[i+1])

top5sal(data4)#calling the function

#closing the file
f1.close()
```

```
f2.close()
f3.close()
f4.close()
```

OUTPUT:



```
THE STUDENT DETAIL FILE CONTENTS ARE: [['NAME', 'ROLL NO', 'GENDER', 'BATCH'], ['Priyali', '201', 'F', 'B1'], ['Sumitra', '202', 'F', 'B2'], ['Nandini', '203', 'F', 'B3'], ['Aswini', '

THE PLACEMENT FILE DETAILS ARE: [['ROLL NO', 'COMPANY NAME', 'SALARY'], ['201', 'LG', '1000000'], ['202', 'PANASONIC', '2000000'], ['203', 'HITACHI', '1500000'], ['204', 'WOLKSWAGEN',

THE GRADES FILE DETAILS ARE: [['ROLL NO', 'CORE', 'PSYCHOLOGY', 'ECONOMICS'], ['201', '100', '89', '89'], ['202', '95', '68', '65'], ['203', '89', '98', '98'], ['204', '69', '78', '69'


The merged file is: [['NAME', 'ROLL NO', 'GENDER', 'BATCH', 'ROLL NO', 'COMPANY NAME', 'SALARY', 'ROLL NO', 'CORE', 'PSYCHOLOGY', 'ECONOMICS'], ['Priyali', '201', 'F', 'B1', '201', 'LG

The salary data is:
1000000
2000000
1500000
3500000
4000000
100000
2000000
2500000
1700000
1900000

The salary data is:
1000000
2000000
1500000
3500000
4000000
100000
2000000
2500000
1700000
1900000

The max salary is: 4000000

The min salary is: 100000
```

```
The salary data is:
1000000
2000000
1500000
3500000
4000000
100000
2000000
2500000
1700000
1900000

The max salary is: 4000000

The min salary is: 100000

The highest grade is: 100

The lowest grade is: 65
The average salary is: 2020000.0

Top 5 salary records are:
['Aswini', '204', 'F', 'B4', '204', 'WOLKSWAGEN', '3500000', '204', '69', '78', '69']
['Kedar', '207', 'M', 'B3', '207', 'UNILIVER INDIA', '2000000', '207', '96', '99', '91']
['Aaditya', '205', 'M', 'B1', '205', 'TATA', '4000000', '205', '99', '65', '98']
['Darshan', '210', 'M', 'B4', '210', 'RELIANCE ', '1900000', '210', '65', '98', '99']
['Sumitra', '202', 'F', 'B2', '202', 'PANASONIC', '2000000', '202', '95', '68', '65']
```