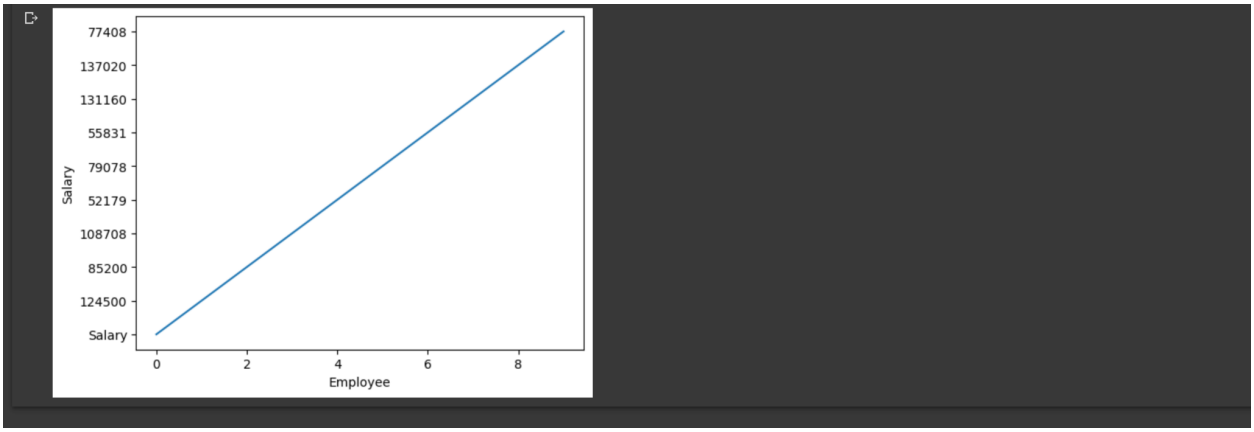
EDS PRACTICAL 5 (ASSIGNMENT)
DATASET : BASIC DETAILS OF EMPLOYEES OF A COMPANY

1. Print the first 10 salaries from a given dataset using a line graph.

Code:

```
import matplotlib.pyplot as plt
import csv

def print_first_10_salary(employee_data):
 salaries = []
 for row in employee_data[:10]:
   salary = row[6]
   salaries.append(salary)

 plt.plot(salaries)
 plt.xlabel("Employee")
 plt.ylabel("Salary")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_first_10_salary(employee_data)
```

Output:

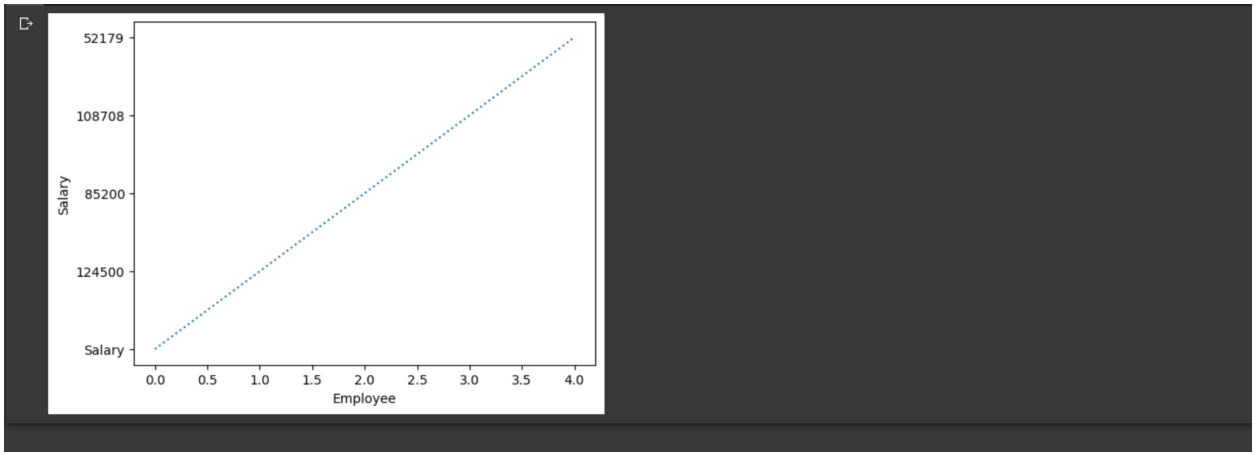


2. Print first 5 salaries from the dataset in a dotted line graph.

Code :

```
import matplotlib.pyplot as plt
import csv

def print_first_10_salary_dotted_line(employee_data):
 salaries = []
 for row in employee_data[:5]:
   salary = row[6]
   salaries.append(salary)

 plt.plot(salaries, linestyle='dotted')
 plt.xlabel("Employee")
 plt.ylabel("Salary")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_first_10_salary_dotted_line(employee_data)
```

Output :

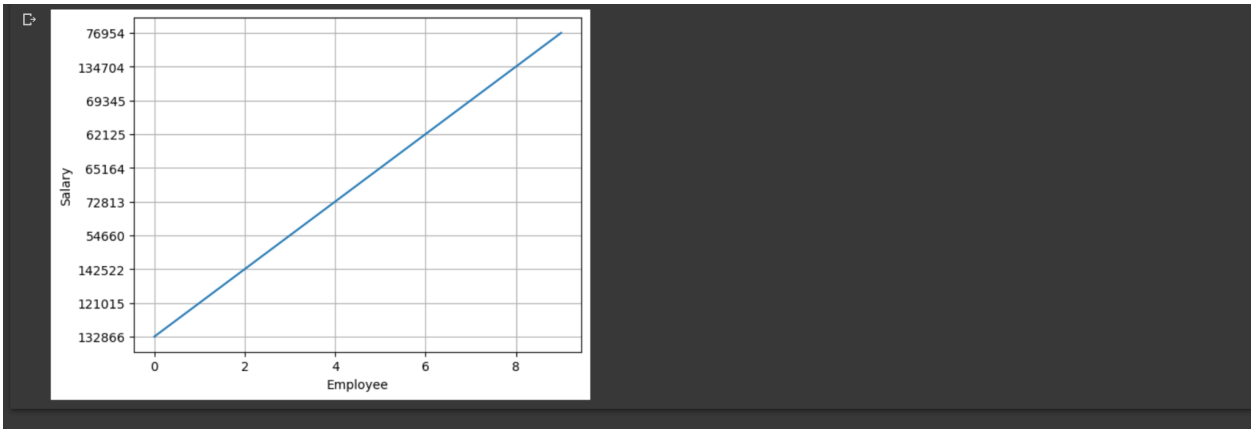


3. Print the last 10 salaries from a given dataset using a grid in line graph.

Code:

```
import matplotlib.pyplot as plt
import csv

def print_last_10_salary_grid(employee_data):
 salaries = []
 for row in employee_data[-10:]:
   salary = row[6]
   salaries.append(salary)

 plt.plot(salaries)
 plt.grid(True)
 plt.xlabel("Employee")
 plt.ylabel("Salary")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_last_10_salary_grid(employee_data)
```

Output:

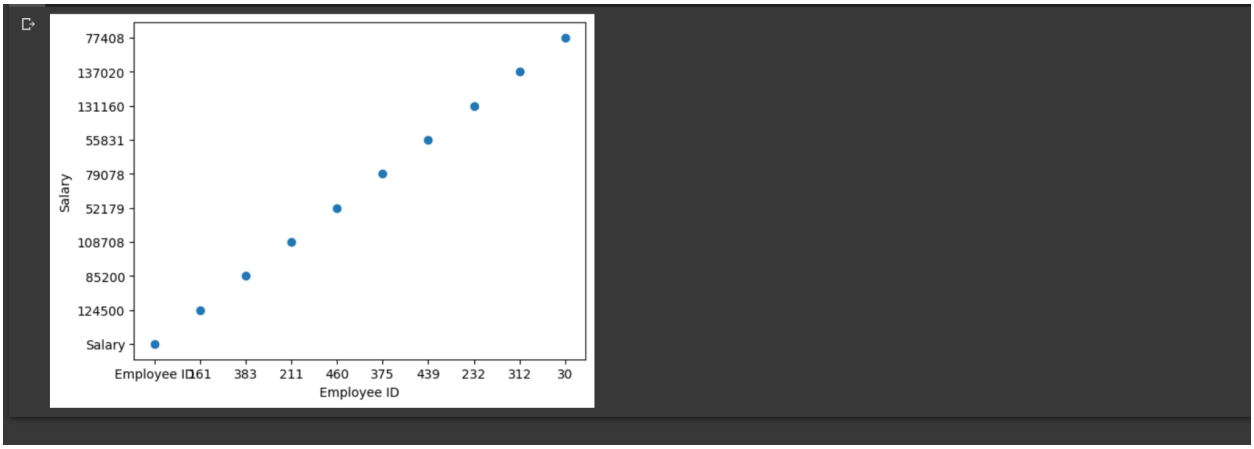


4. Print first 10 employee id from a given dataset in scatter plot

Code :

```
import matplotlib.pyplot as plt
import csv

def print_first_10_employee_id_scatter_plot(employee_data):
 employee_ids = []
 salaries = []
 for row in employee_data[:10]:
   employee_id = row[1]
   salary = row[6]
   employee_ids.append(employee_id)
   salaries.append(salary)

 plt.scatter(employee_ids, salaries)
 plt.xlabel("Employee ID")
 plt.ylabel("Salary")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_first_10_employee_id_scatter_plot(employee_data)
```

Output:

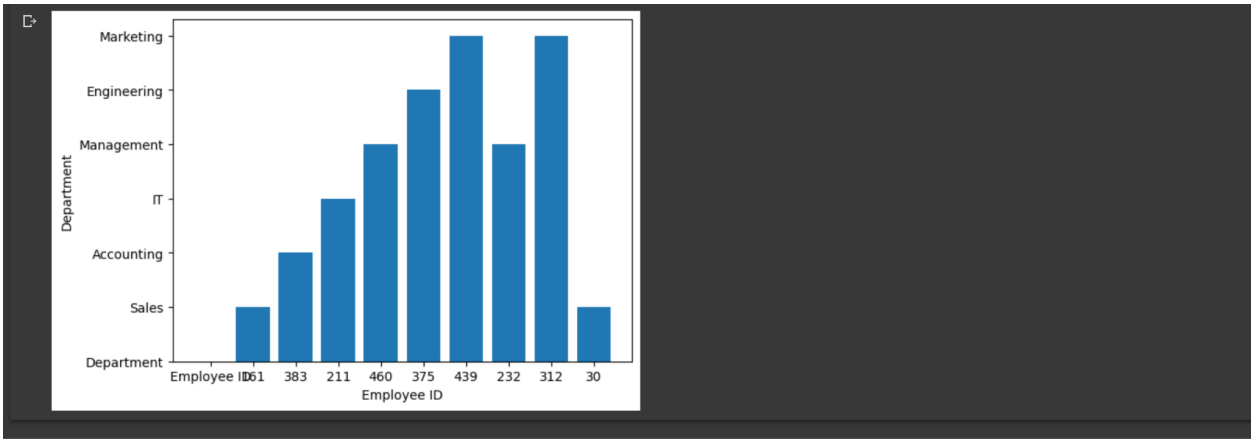


5. Print first 10 employee id Vs department from a given dataset using bars.

Code :

```
import matplotlib.pyplot as plt
import csv

def print_first_10_employee_id_department_bars(employee_data):
 employee_ids = []
 departments = []
 for row in employee_data[:10]:
   employee_id = row[1]
   department = row[5]
   employee_ids.append(employee_id)
   departments.append(department)

 plt.bar(employee_ids, departments)
 plt.xlabel("Employee ID")
 plt.ylabel("Department")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_first_10_employee_id_department_bars(employee_data)
```

Output :



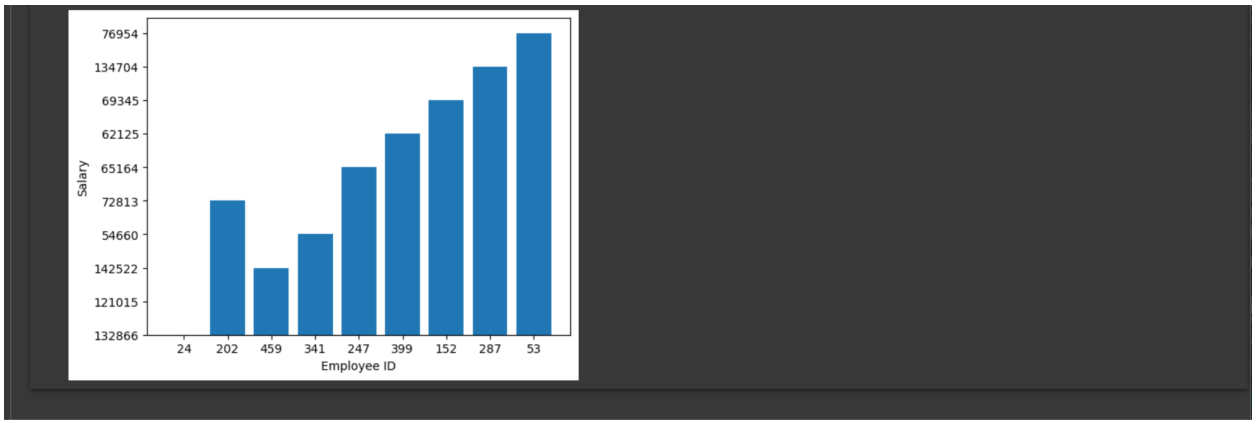
6. Print the last 10 employee id Vs salary from a given dataset using bars.

Code :

```
import matplotlib.pyplot as plt
import csv

def print_last_10_employee_id_salary_bars(employee_data):
 employee_ids = []
 salaries = []
 for row in employee_data[-10:]:
   employee_id = row[1]
   salary = row[6]
   employee_ids.append(employee_id)
   salaries.append(salary)

 plt.bar(employee_ids, salaries)
 plt.xlabel("Employee ID")
 plt.ylabel("Salary")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)
```

```
print_last_10_employee_id_salary_bars(employee_data)
```

Output :

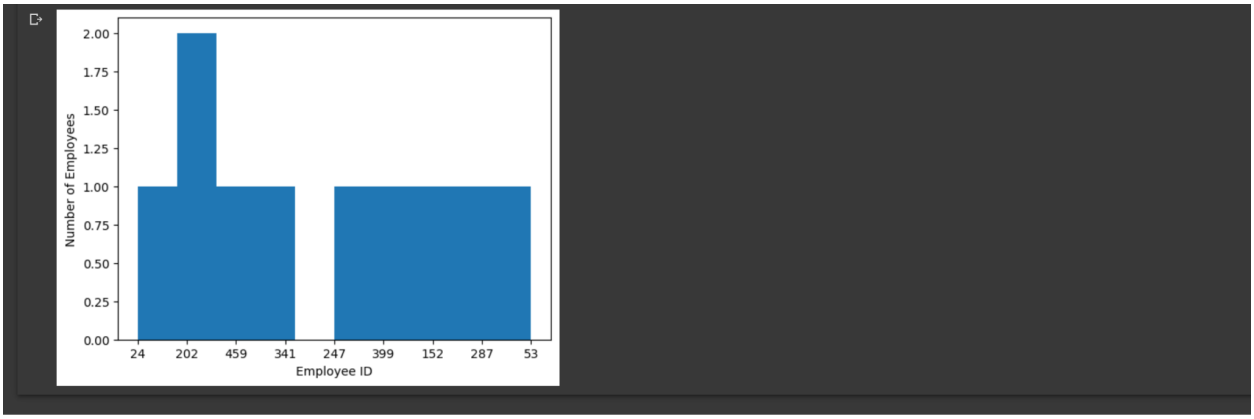


7. Print the last 10 employee id from a given dataset using histogram.

Code :

```
import matplotlib.pyplot as plt
import csv

def print_last_10_employee_id_histogram(employee_data):
 employee_ids = []
 for row in employee_data[-10:]:
   employee_id = row[1]
   employee_ids.append(employee_id)

 plt.hist(employee_ids)
 plt.xlabel("Employee ID")
 plt.ylabel("Number of Employees")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_last_10_employee_id_histogram(employee_data)
```

Output :

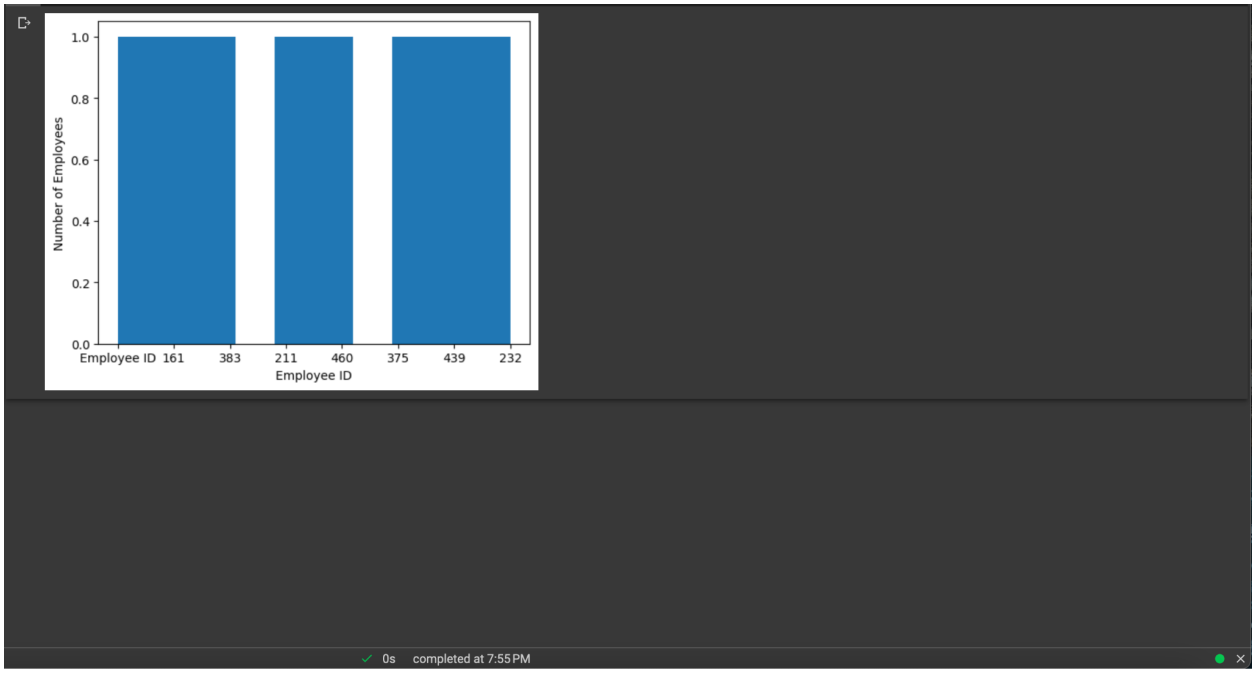


8. To print the first 8 Employee id using bars.

Code :

```
import matplotlib.pyplot as plt
import csv

def print_last_10_employee_id_histogram(employee_data):
 employee_ids = []
 for row in employee_data[:8]:
   employee_id = row[1]
   employee_ids.append(employee_id)

 plt.hist(employee_ids)
 plt.xlabel("Employee ID")
 plt.ylabel("Number of Employees")
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_last_10_employee_id_histogram(employee_data)
```

Output :

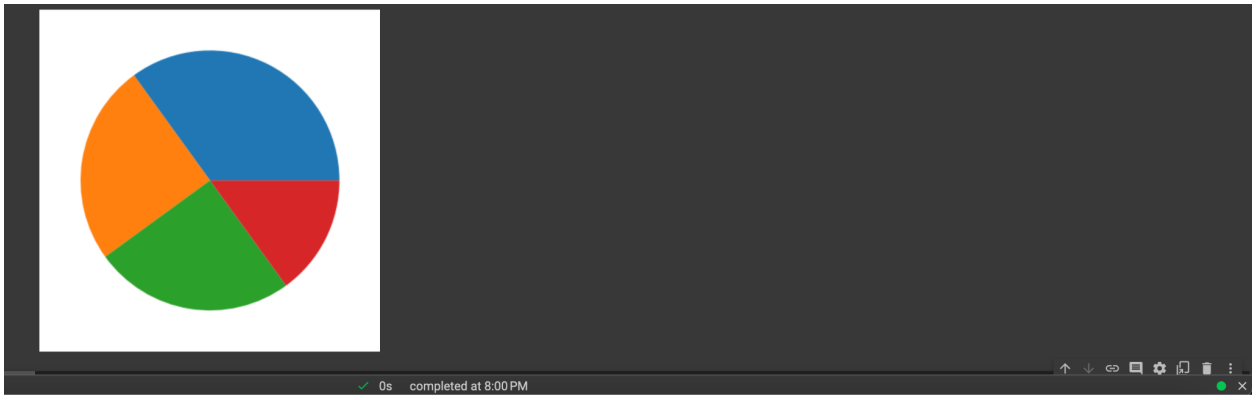


9. Print the salary of the first 4 employees using a pie chart.

Code :

```
import matplotlib.pyplot as plt
import csv

def print_first_10_salary_pie_chart(employee_data):
 salaries = []
 for row in employee_data[:4]:
   salary = row[5]
   salaries.append(salary)

 plt.pie(salaries)
 plt.show()

with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_first_10_salary_pie_chart(employee_data)
```

Output :



10. Print the last 5 employee id and department from a given dataset using subplots.

Code:

```
import matplotlib.pyplot as plt
import csv

def print_last_5_employee_id_department_subplot(employee_data):
 employee_ids = []
 departments = []
 for row in employee_data[-5:]:
   employee_id = row[1]
   department = row[5]
   employee_ids.append(employee_id)
   departments.append(department)

 fig, axes = plt.subplots(1, 2, figsize=(10, 5))
 axes[0].bar(employee_ids, departments)
 axes[0].set_xlabel("Employee ID")
 axes[0].set_ylabel("Department")
 axes[1].hist(departments)
 axes[1].set_xlabel("Department")
 axes[1].set_ylabel("Number of Employees")
 plt.show()
```

```
with open("/content/employee-records.xlsx - Sheet1.csv", "r") as csvfile:
 reader = csv.reader(csvfile, delimiter=",")
 employee_data = list(reader)

print_last_5_employee_id_department_subplot(employee_data)
```

Output: