# Establish a connection

import mysql.connector

mydb=mysql.connector.connect(

host="localhost",

user="root",

password="",

database="ems")

#Insert Employee Details

def insert\_employee(emp\_list):

cursor=mydb.cursor()

query="insert into employee values (%s,%s,%s,%s,%s)"

values=(emp\_list[0],emp\_list[1],emp\_list[2],emp\_list[3],emp\_list[4])

cursor.execute(query,values)

print("The Employee Details are Inserted")

mydb.commit()

cursor.close()

# Update employee details

def update\_employee(emp\_id,emp\_dept):

cursor=mydb.cursor()

query = "UPDATE employee SET emp\_dept = %s WHERE emp\_id = %s"

values=(emp\_dept,emp\_id)

cursor.execute(query,values)

print("The Employee Details are Updated")

mydb.commit()

cursor.close()

# Delete Employee Details

def delete\_employee(emp\_id):

cursor=mydb.cursor()

query="delete from employee where emp\_id=%s"

values=emp\_id

cursor.execute(query,(values,))

print("The Employee Details are Deleted")

mydb.commit()

cursor.close()

# List all employee details

def list\_employee():

cursor=mydb.cursor()

query="select \* from employee"

cursor.execute(query)

result=cursor.fetchall()

if result:

print("EMPLOYEE DETAILS")

print("----------------")

for row in result:

print("Employee Id: ",row[0])

print("Employee Name: ",row[1])

print("Salary: ",row[2])

print("Department: ",row[3])

print("Employee Email: ",row[4])

print("---------------")

else:

print("No Employee details found in the table")

cursor.close()

# sort employee based on department

def sort\_employee\_department():

cursor=mydb.cursor()

query="select \* from employee order by emp\_dept"

cursor.execute(query)

result=cursor.fetchall()

if result:

print("EMPLOYEE DETAILS")

print("----------------")

for row in result:

print("Employee Id: ",row[0])

print("Employee Name: ",row[1])

print("Salary: ",row[2])

print("Department: ",row[3])

print("Employee Email: ",row[4])

print("---------------")

else:

print("No Employee details found in the table")

cursor.close()

# sort employee based on Salary

def sort\_employee\_salary():

cursor=mydb.cursor()

query="select \* from employee order by emp\_salary"

cursor.execute(query)

result=cursor.fetchall()

if result:

print("EMPLOYEE DETAILS")

print("----------------")

for row in result:

print("Employee Id: ",row[0])

print("Employee Name: ",row[1])

print("Salary: ",row[2])

print("Department: ",row[3])

print("Employee Email: ",row[4])

print("---------------")

else:

print("No Employee details found in the table")

cursor.close()

# search employee based on the department

def search\_employee\_dept(dept):

cursor=mydb.cursor()

query="select \* from employee where emp\_dept=%s"

values=(dept,)

cursor.execute(query,values)

result=cursor.fetchall()

if result:

print("EMPLOYEE DETAILS")

print("----------------")

for row in result:

print("Employee Id",row[0])

print("Employee Name",row[1])

print("Salary",row[2])

print("Department",row[3])

print("Employee Email: ",row[4])

print("---------------")

else:

print("No MAtching found...")

cursor.close()

# search employee based on the keyword in the name

def search\_employee\_name(keyword):

cursor=mydb.cursor()

query="select \* from employee where emp\_name like '{}%'".format(keyword)

cursor.execute(query)

result=cursor.fetchall()

if result:

print("EMPLOYEE DETAILS")

print("----------------")

for row in result:

print("Employee Id",row[0])

print("Employee Name",row[1])

print("Salary",row[2])

print("Department",row[3])

print("Employee Email: ",row[4])

print("---------------")

else:

print("No MAtching found...")

cursor.close()

# Search employee based on the salary range

def employee\_salary\_search(minrange,maxrange):

cursor=mydb.cursor()

query="select \* from employee where emp\_salary between %s and %s"

values=(minrange,maxrange)

cursor.execute(query,values)

result=cursor.fetchall()

if result:

print("EMPLOYEE DETAILS")

print("----------------")

for row in result:

print("Employee Id",row[0])

print("Employee Name",row[1])

print("Salary",row[2])

print("Department",row[3])

print("Employee Email: ",row[4])

print("---------------")

else:

print("No Employee in this salary range...")

cursor.close()

if \_\_name\_\_=="\_\_main\_\_":

while True:

print("Employee Management System")

print("Enter your choices")

print("1.Create Employee")

print("2.Update Employee")

print("3.Delete Employee")

print("4. List all Employee")

print("5. Sort Employees based on Department")

print("6. Sort Employees based on Salary")

print("7. Employee search based on Department")

print("8. Employee search based on Salary Range ")

print("9. Employee name Search ")

print("10. Exit")

ch=int(input("Enter your choice: "))

if ch==1:

emp\_list=[]

emp\_id=input("Enter Employee Id: ")

emp\_list.append(emp\_id)

emp\_name=input("Enter Employee Name: ")

emp\_list.append(emp\_name)

emp\_salary=input("Enter Employee Salary: ")

emp\_list.append(emp\_salary)

emp\_dept=input("Enter Employee Department: ")

emp\_list.append(emp\_dept)

emp\_email=input("Enter Employee Email: ")

emp\_list.append(emp\_email)

insert\_employee(emp\_list)

elif ch==2:

emp\_id=input("Enter Employee Id to update")

emp\_dept=input("Enter Employee Department")

update\_employee(emp\_id,emp\_dept)

elif ch==3:

emp\_id=int(input("Enter Employee Id to delete employee details"))

delete\_employee(emp\_id)

elif ch==4:

list\_employee()

elif ch==5:

sort\_employee\_department()

elif ch==6:

sort\_employee\_salary()

elif ch==7:

dept=input("Enter the Department to search:")

search\_employee\_dept(dept)

elif ch==8:

minrange=float(input("Enter minimum salary"))

maxrange=float(input("Enter maximum salary"))

employee\_salary\_search(minrange,maxrange)

elif ch==9:

keyword=input("Enter the keyword to search:")

search\_employee\_name(keyword)

elif ch==10:

break

else:

print("Invalid choice. Plase try again")

mydb.close()

Output

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

Enter your choice: 1

Enter Employee Id: 10

Enter Employee Name: SAM

Enter Employee Salary: 20000

Enter Employee Department: CS

Enter Employee Email: sam@gmail.com

The Employee Details are Inserted

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

Enter your choice: 2

Enter Employee Id to update10

Enter Employee DepartmentIT

The Employee Details are Updated

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

Enter your choice: 4

EMPLOYEE DETAILS

----------------

Employee Id: 1

Employee Name: JOHN DOE

Salary: 500000.00

Department: IT

Employee Email: john@gmail.com

---------------

Employee Id: 2

Employee Name: JOHAN

Salary: 600000.00

Department: CS

Employee Email: johan@gmail.com

---------------

Employee Id: 3

Employee Name: ADAM

Salary: 600000.00

Department: EC

Employee Email: adam@gmail.com

---------------

Employee Id: 4

Employee Name: ANDRYA

Salary: 400000.00

Department: CS

Employee Email: andrya@gmail.com

---------------

Employee Id: 8

Employee Name: JOSH

Salary: 30000.00

Department: EC

Employee Email: josh@gmail.com

---------------

Employee Id: 9

Employee Name: Dana

Salary: 40000.00

Department: IT

Employee Email: dana@gmail.com

---------------

Employee Id: 10

Employee Name: SAM

Salary: 20000.00

Department: IT

Employee Email: sam@gmail.com

---------------

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

Enter your choice5

EMPLOYEE DETAILS

----------------

Employee Id: 2

Employee Name: JOHAN

Salary: 600000.00

Department: CS

Employee Email: johan@gmail.com

---------------

Employee Id: 4

Employee Name: ANDRYA

Salary: 400000.00

Department: CS

Employee Email: andrya@gmail.com

---------------

Employee Id: 3

Employee Name: ADAM

Salary: 600000.00

Department: EC

Employee Email: adam@gmail.com

---------------

Employee Id: 8

Employee Name: JOSH

Salary: 30000.00

Department: EC

Employee Email: josh@gmail.com

---------------

Employee Id: 1

Employee Name: JOHN DOE

Salary: 500000.00

Department: IT

Employee Email: john@gmail.com

---------------

Employee Id: 9

Employee Name: Dana

Salary: 40000.00

Department: IT

Employee Email: dana@gmail.com

---------------

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

Enter your choice6

EMPLOYEE DETAILS

----------------

Employee Id: 8

Employee Name: JOSH

Salary: 30000.00

Department: EC

Employee Email: josh@gmail.com

---------------

Employee Id: 9

Employee Name: Dana

Salary: 40000.00

Department: IT

Employee Email: dana@gmail.com

---------------

Employee Id: 4

Employee Name: ANDRYA

Salary: 400000.00

Department: CS

Employee Email: andrya@gmail.com

---------------

Employee Id: 1

Employee Name: JOHN DOE

Salary: 500000.00

Department: IT

Employee Email: john@gmail.com

---------------

Employee Id: 2

Employee Name: JOHAN

Salary: 600000.00

Department: CS

Employee Email: johan@gmail.com

---------------

Employee Id: 3

Employee Name: ADAM

Salary: 600000.00

Department: EC

Employee Email: adam@gmail.com

---------------

Employee Management System

Enter your choices

1.Create Employee

2.Update Employee

3.Delete Employee

4. List all Employee

5. Sort Employees based on Department

6. Sort Employees based on Salary

7. Employee search based on Department

8. Employee search based on Salary Range

9. Employee name Search

10. Exit

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