

Experiment 10: Write a program to implement an employee management system using classes, instances and inheritance.

CODE:

```
# Parent class: Employee
class Employee:
    def __init__(self,name,employee_id):
        self.name = name
        self.employee_id=employee_id
    def display_info(self):
        print("Employee ID: ",self.employee_id)
        print("Name: ",self.name)

# Derived class: Manager (inherits from Employee)
class Manager(Employee):
    def __init__(self,name,employee_id,department):
        super().__init__(name,employee_id)
        self.department= department
    def display_info(self):
        super().display_info()
        print("Department: ",self.department)

# Derived class: Developer (inherits from Employee)
class Developer(Employee):
    def __init__(self,name,employee_id,programming_language):
        super().__init__(name,employee_id)
        self.programming_language = programming_language
    def display_info(self):
        super().display_info()
        print("Programming Language: ",self.programming_language)

# Get runtime input for Manager
manger_name = input("Enter Manager's name: ")
manger_id = int(input("Enter Manager's ID: "))
```

```
manger_department = input("Enter Manager's Department: ")

# Get runtime input for Programmer
developer_name = input("Enter Developer's name: ")
developer_id = int(input("Enter Developer's ID: "))
programming_language = input("Enter Developer's Programming
Language: ")

# Creating instances of Manager and Developers classes
manager = Manager(manger_name,manger_id,manger_department)
developer =
Developer(developer_name,developer_id,programming_language)

# Display information of Manager Developer
print("\nManager Information:")
manager.display_info()
print("\nDeveloper Information:")
developer.display_info()
```

OUTPUT:

```
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 1
Enter first number: 5
Enter second number: 6
Result: 11.0
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 2
Enter first number: 5
Enter second number: 6
Result: -1.0
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 3
Enter first number: 5
Enter second number: 6
Result: 30.0
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 4
Enter first number: 5
Enter second number: 6
Result: 0.8333333333333334
Options:
1: Add
2: Subtract
3: Multiply
4: Divide
5: Exit
Enter Choice(1-5): 5
Exiting the calculator.Goodbye!
```