Lab Session 04

Q1.

INPUT

```
class Person:  3 usages  Usman Rasheed Siddiqui
    def __init__(self, name=''):  Usman Rasheed Siddiqui
        self.name = name

    def showName(self):  3 usages  Usman Rasheed Siddiqui
        print(f"Name: {self.name}")

class Student(Person):  1 usage  Usman Rasheed Siddiqui
    def __init__(self, name='', dept='', year=0000):  Usman Rasheed Siddiqui
        super().__init__(name)
        self.department = dept
        self.year = year

    def showName(self):  1 usage  Usman Rasheed Siddiqui
        super().showName()
        print(f"Department: {self.department}")
        print(f"Year: {self.year}")

class Teacher(Person):  1 usage  Usman Rasheed Siddiqui
    def __init__(self, name='', course=''):  Usman Rasheed Siddiqui
        super().__init__(name)
        self.course = course

    def showName(self):  1 usage  Usman Rasheed Siddiqui
        super().showName()
        print(f"Course: {self.course}")

p1 = Person("Ali")
p1.showName()
p2 = Student( name: "Usman",  dept: "CIS Department",  year: 2024)
p2.showName()
p3 = Teacher( name: "Ahmed",  course: "Functional English")
p3.showName()
```

OUTPUT

```
Name: Ali
Name: Usman
Department: CIS Department
Year: 2024
Name: Ahmed
Course: Functional English
```

Q2.

INPUT

```
class Bank_Account:  3 usages  Usman Rasheed Siddiqui
    def __init__(self):  Usman Rasheed Siddiqui
        self.account_no = int(input("Enter your account no.: "))

    def showAccountInfo(self):  2 usages  Usman Rasheed Siddiqui
        print(f"Account No.: {self.account_no}")

class Saving_Account(Bank_Account):  1 usage  Usman Rasheed Siddiqui
    def __init__(self):  Usman Rasheed Siddiqui
        super().__init__()
        self.minimum_balance = int(input("Enter Minimum Balance: "))
        self.interest_rate = int(input("Enter Interest Rate: "))
```

OUTPUT

```
Enter your account no.: 24001
Enter Minimum Balance: 24000
Enter Interest Rate: 500
Account No.: 24001
Minimum Balance: 24000
Interest Rate: 500
Enter your account no.: 24001
Enter Withdrawal Limit: 2000
Account No.: 24001
Withdrawal Amount: 2000
```

```
    def showAccountInfo(self):  1 usage  Usman Rasheed Siddiqui
        super().showAccountInfo()
        print(f"Minimum Balance: {self.minimum_balance}")
        print(f"Interest Rate: {self.interest_rate}")


class Current_Account(Bank_Account):  Usman Rasheed Siddiqui
    def __init__(self):  Usman Rasheed Siddiqui
        super().__init__()
        self.withdrawl_limit = int(input("Enter Withdrawal Limit: "))

    def showAccountInfo(self):  Usman Rasheed Siddiqui
        Bank_Account.showAccountInfo(self)
        print(f"Withdrawal Amount: {self.withdrawl_limit}")

sa1 = Saving_Account()
sa1.showAccountInfo()
sa2 = Current_Account()
sa2.showAccountInfo()
```

Q3.

INPUT

```
class Employee:  2 usages  Usman Rasheed Siddiqui
    def __init__(self):  Usman Rasheed Siddiqui
        self.employee_id =input("Enter Employee ID: ")
        self.employee_name = input("Enter Employee name: ")
        self.designation = input("Enter designation: ")

    def ShowInfo(self):  2 usages  Usman Rasheed Siddiqui
        print(f"Employee ID: {self.employee_id}")
        print(f"Employee Name: {self.employee_name}")
        print(f"Designation: {self.designation}")

class Manager(Employee):  1 usage  Usman Rasheed Siddiqui
    def __init__(self):  Usman Rasheed Siddiqui
        super().__init__()
        self.manager_performance = input("Enter manager's performance: ")
        self.no_of_teams_managed = int(input("Enter number of teams being managed: "))

    def ShowInfo(self):  1 usage  Usman Rasheed Siddiqui
        super().ShowInfo()
        print(f"Manager Performance: {self.manager_performance}")
        print(f"No of Teams Being Managed: {self.no_of_teams_managed}")

class Clerk(Employee):  1 usage  Usman Rasheed Siddiqui
    def __init__(self,timing, name=''):  Usman Rasheed Siddiqui
        super().__init__()
        self.teamName = name
        self.timings = timing

    def ShowInfo(self):  1 usage  Usman Rasheed Siddiqui
        super().ShowInfo()
        print(f"Team Name: {self.teamName}")
        print(f"Timings: {self.timings} hrs")

c1 = Clerk( timing: 4,  name: "Dolphins")
c1.ShowInfo()
c2 = Manager()
c2.ShowInfo()
```

OUTPUT

```
Enter Employee ID: 24190
Enter Employee name: Ahmed
Enter designation: Software Engineer
Employee ID: 24190
Employee Name: Ahmed
Designation: Software Engineer
Team Name: Dolphins
Timings: 4 hrs
Enter Employee ID: 24038
Enter Employee name: Usman
Enter designation: Computer Engineer
Enter manager's performance: Brilliant
Enter number of teams being managed: 4
Employee ID: 24038
Employee Name: Usman
Designation: Computer Engineer
Manager Performance: Brilliant
No of Teams Being Managed: 4
```