

```

public class Employee {
    private String name;
    private int age;
    private char gender;
    public Employee()
    {
        name = " ";
        age = 0;
        gender = ' ';
    }

    public Employee(String nn, int aa, char gg)
    {
        name = nn;
        age = aa;
        gender = gg;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public int getAge() {
        return age;
    }

    public void setAge(int age) {
        this.age = age;
    }

    public char getGender() {
        return gender;
    }

    public void setGender(char gender) {
        this.gender = gender;
    }

    public String toString() {
        return ("The name is: " + name + "\nThe age is: " + age +
            "\nThe gender is: " + gender);
    }

    public void display()
    {
        System.out.println("The name is: " + name);
        System.out.println("The age is: " + age);
        System.out.println("The gender is: " + gender);}}

```

```

public class Company {
    private String name;
    private Employee [] ArrEmp;
    private int nbe;

    public Company()
    {
        name = " ";
        ArrEmp = new Employee[100];
        nbe =0;
    }
    public Company(String nn, int size)
    {
        name = nn;
        ArrEmp = new Employee[size];
        nbe =0;
    }

    public boolean insertEmployee(Employee EE)
    {
        if(nbe<ArrEmp.length)
        {
            ArrEmp[nbe] = EE;
            nbe++;
            return true;
        }
        else return false;
    }

    public void display()
    {
        System.out.println("The name of the Company is: " + name);
        System.out.println("The Employees are: ");
        for(int i=0; i<nbe; i++)
            ArrEmp[i].display();
    }

    public boolean deleteEmployee(int pos)
    {
        if(nbe == 0)
            return false;
        else
        {
            ArrEmp[pos] = ArrEmp[nbe -1];
            ArrEmp[nbe -1] = null;
            nbe--;
            return true;
        }
    }
}

```

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public boolean findhByName(String name)
{
    for(int i=0; i<nbe; i++)
    {
        if(ArrEmp[i].getName().equals(name))
            return true;
    }
    return false;
}

public int findEmployee(Employee EE)
{
    for(int i=0; i<nbe; i++)
    {
        if(ArrEmp[i].getName().equals(EE.getName()))
            if(ArrEmp[i].getAge() == EE.getAge())
                if(ArrEmp[i].getGender() == EE.getGender())
                    return i;
    }
    return -1;
}

public boolean deleteEmployee(Employee EE)
{
    int pos = findEmployee(EE);
    if(pos!=-1)
    {
        ArrEmp[pos] = ArrEmp[nbe -1];
        ArrEmp[nbe -1] = null;
        nbe--;
        return true;
    }
    else
        return false;
}

public double averageOfAge()
{
    int sum =0;
    for(int i=0; i<nbe;i++)
    {
        sum+=ArrEmp[i].getAge();
    }

    if(nbe !=0)
        return (double)sum/nbe;
    else
        return 0.0;}

```

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public Employee oldestEmployee()
{
    Employee oldest = ArrEmp[0];

    for(int i=1; i<nbe;i++)
    {
        if(ArrEmp[i].getAge()> oldest.getAge())
            oldest = ArrEmp[i];
    }

    return oldest;
}
}

```

```

public class testCompany {
    public static void main(String[] args) {
        Company CC = new Company("AL Marai", 10);
        Employee E1 = new Employee("Ali", 34, 'M');
        Employee E2 = new Employee("Nora", 37, 'F');
        Employee E3 = new Employee("Zeinab", 38, 'F');
        Employee E4 = new Employee("Bader", 40, 'M');

        CC.insertEmployee(E1);
        CC.insertEmployee(E2);
        CC.insertEmployee(E3);
        CC.insertEmployee(E4);

        CC.display();
        System.out.println("=====");

        CC.deleteEmployee(2);
        CC.display();
        System.out.println("=====");

        System.out.println(CC.findhByName("Bader"));
        System.out.println("=====");

        System.out.println("The Object was found at: " +CC.findEmployee(E2));
        System.out.println("=====");

        CC.deleteEmployee(E1);
        System.out.println("Print Objects after delete:");

        CC.display();
        System.out.println("=====");
        System.out.println("The average is: " + CC.averageOfAge());

        System.out.println("=====");
        Employee res = CC.oldestEmployee();
        System.out.println("The oldest Employee is: " + res.getName());}}

```