

Домашно 3. Преобразуване от E/R към ODL

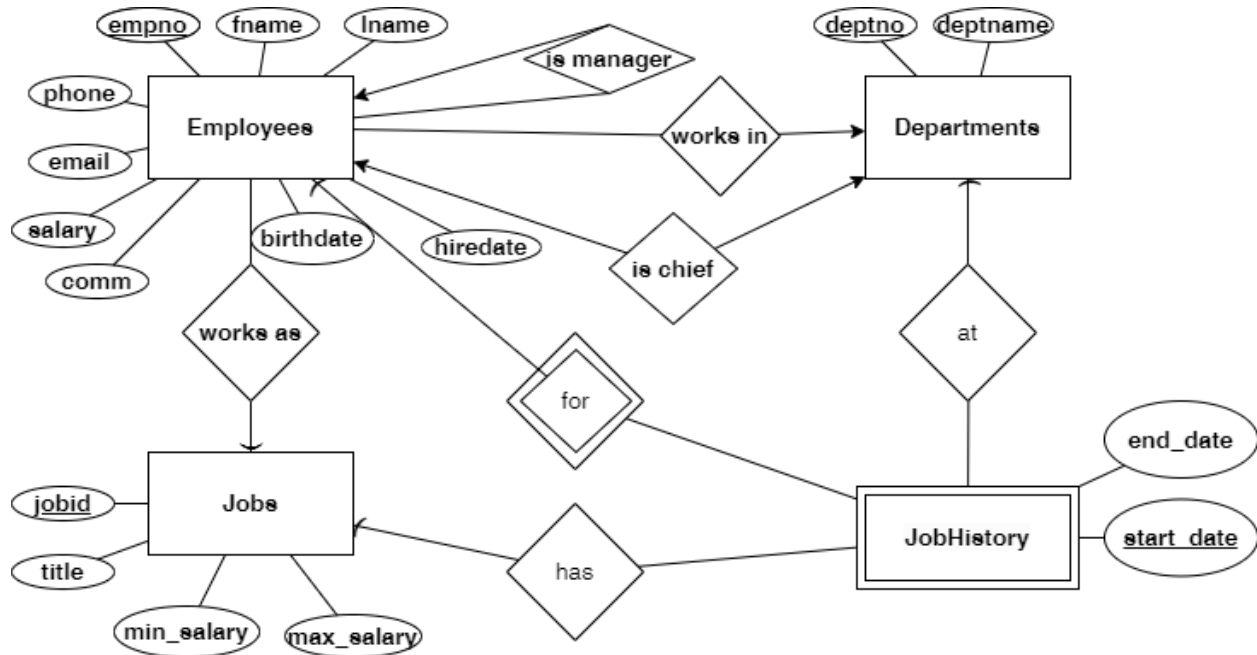


Схема на базата от данни (в обектно-ориентиран модел на данни):

REL: Departments (deptno, deptname, empno_mgr)

```
class Department (extent Departments key(deptno)) {
    attribute string deptno;
    attribute string deptname;
    relationship Set<Employee> fk_emps_depts inverse Employee :: deptno;
    relationship Employee empno_mgr inverse Employee :: empno_chief_dept;
    relationship Set<JobHistory> fk_jobh_depts inverse JobHistory :: deptno;
}
```

Employees (empno, fname, lname, birthdate, hiredate, phone, email, salary, comm, jobid, deptno, mgrno)

```
class Employee (extent Employees key(empno)) {
    attribute string empno;
    attribute string fname;
    attribute string lname;
    attribute date birthdate;
    attribute date hiredate;
```

```

attribute string phone;
attribute string email;
attribute double salary;
attribute double comm;
relationship Job jobid inverse Job :: fk_emps_jobs;
relationship Departments empno_chief_dept inverse Departments :: empno_mgr;
relationship Departments deptno inverse Departments :: fk_emps_depts;
relationship Set<Employee> fk_empno_mgrno inverse Employee :: mgrno;
relationship Employee mgrno inverse Employee :: fk_empno_mgrno;
relationship Set<JobHistory> fk_empno_jobh inverse JobHistory :: empno;
}

```

REL: Jobs (jobid, title, min_salary, max_salary)

```

class Job (extent Jobs key(jobid)) {
    attribute int jobid;
    attribute string title;
    attribute double min_salary;
    attribute double max_salary;
    relationship Set<Employee> fk_emps_jobs inverse Employee::jobid;
    relationship Set<JobHistory> fk_jobh_jobs inverse JobHistory::jobid;
}

```

JobHistory (empno, start_date, end_date, jobid, deptno)

```

Class JobHistory (extent JobHistories) {
    attribute date start_date;
    attribute date end_date;
    relationship Job jobid inverse Job :: fk_jobh_jobs;
    relationship Departments deptno inverse Departments :: fk_jobh_depts;
    relationship Employee empno inverse Employee :: fk_empno_jobh;
}

```