Ernest (Jiachang) Xu

CSCI 485: File and Database Management

Assignment #2: Using a Relational Database Management System named PostgreSQL

18 Feb. 2018

**Dump of PostgreSQL Schema**

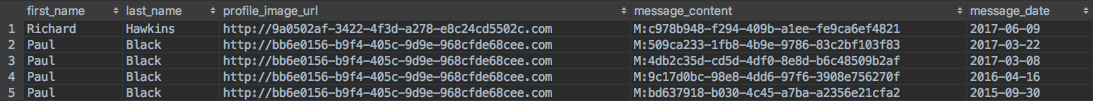
--  
-- PostgreSQL database dump  
--  
  
-- Dumped from database version 10.2  
-- Dumped by pg\_dump version 10.2  
  
**SET** statement\_timeout = 0;  
**SET** lock\_timeout = 0;  
**SET** idle\_in\_transaction\_session\_timeout = 0;  
**SET** client\_encoding = 'UTF8';  
**SET** standard\_conforming\_strings = **on**;  
**SET** check\_function\_bodies = **false**;  
**SET** client\_min\_messages = **warning**;  
**SET** row\_security = **off**;  
  
**SET** search\_path = **public**, pg\_catalog;  
  
**SET** default\_tablespace = '';  
  
**SET** default\_with\_oids = **false**;  
  
--  
-- Name: chatbot; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** chatbot (  
 questionid **bigint NOT NULL**,  
 userid **bigint NOT NULL**,  
 question **character varying NOT NULL**);  
  
  
**ALTER TABLE** chatbot **OWNER TO** postgres;  
  
--  
-- Name: chatbotanswer; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** chatbotanswer (  
 applicationid **bigint NOT NULL**,  
 questionid **bigint NOT NULL**,  
 answer **character varying NOT NULL**);  
  
  
**ALTER TABLE** chatbotanswer **OWNER TO** postgres;  
  
--  
-- Name: company; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** company (  
 companyid **bigint NOT NULL**,  
 company\_name **character varying**,  
 social\_media\_handle **character varying**,  
 company\_summary **character varying**,  
 company\_logo **character varying**,  
 company\_size **character varying**,  
 company\_website **character varying**);  
  
  
**ALTER TABLE** company **OWNER TO** postgres;  
  
--  
-- Name: employer; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** employer (  
 userid **bigint NOT NULL**,  
 employer\_position **character varying NOT NULL**);  
  
  
**ALTER TABLE** employer **OWNER TO** postgres;  
  
--  
-- Name: employment; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** employment (  
 companyid **bigint NOT NULL**,  
 userid **bigint NOT NULL**);  
  
  
**ALTER TABLE** employment **OWNER TO** postgres;  
  
--  
-- Name: institute; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** institute (  
 instituteid **bigint NOT NULL**,  
 **name character varying NOT NULL**);  
  
  
**ALTER TABLE** institute **OWNER TO** postgres;  
  
--  
-- Name: jobapplication; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobapplication (  
 applicationid **bigint NOT NULL**,  
 job\_seekerid **bigint NOT NULL**,  
 jobid **bigint NOT NULL**,  
 apply\_date date **NOT NULL**);  
  
  
**ALTER TABLE** jobapplication **OWNER TO** postgres;  
  
--  
-- Name: jobcategory; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobcategory (  
 categoryid **bigint NOT NULL**,  
 category\_name **character varying NOT NULL**);  
  
  
**ALTER TABLE** jobcategory **OWNER TO** postgres;  
  
--  
-- Name: joblist; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** joblist (  
 jobid **bigint NOT NULL**,  
 userid **bigint NOT NULL**,  
 title **character varying NOT NULL**,  
 salary **character varying NOT NULL**,  
 post\_date date **NOT NULL**,  
 responsibility **character varying NOT NULL**,  
 time\_demand **character varying NOT NULL**);  
  
  
**ALTER TABLE** joblist **OWNER TO** postgres;  
  
--  
-- Name: joblistcategory; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** joblistcategory (  
 jobid **bigint NOT NULL**,  
 categoryid **bigint NOT NULL**);  
  
  
**ALTER TABLE** joblistcategory **OWNER TO** postgres;  
  
--  
-- Name: jobseeker; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobseeker (  
 userid **bigint NOT NULL**,  
 summary **character varying NOT NULL**,  
 is\_relation\_ok **boolean NOT NULL**,  
 experience **character varying NOT NULL**,  
 premium\_level **integer NOT NULL**);  
  
  
**ALTER TABLE** jobseeker **OWNER TO** postgres;  
  
--  
-- Name: jobseekercategory; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobseekercategory (  
 userid **bigint NOT NULL**,  
 categoryid **bigint NOT NULL**);  
  
  
**ALTER TABLE** jobseekercategory **OWNER TO** postgres;  
  
--  
-- Name: jobseekercertificate; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobseekercertificate (  
 userid **bigint NOT NULL**,  
 certificate\_name **character varying NOT NULL**);  
  
  
**ALTER TABLE** jobseekercertificate **OWNER TO** postgres;  
  
--  
-- Name: jobseekereducation; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobseekereducation (  
 userid **bigint NOT NULL**,  
 instituteid **bigint NOT NULL**,  
 start\_date date **NOT NULL**,  
 end\_date date **NOT NULL**,  
 degree\_name **character varying NOT NULL**);  
  
  
**ALTER TABLE** jobseekereducation **OWNER TO** postgres;  
  
--  
-- Name: jobseekerhonor; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobseekerhonor (  
 userid **bigint NOT NULL**,  
 honor\_name **character varying NOT NULL**);  
  
  
**ALTER TABLE** jobseekerhonor **OWNER TO** postgres;  
  
--  
-- Name: jobseekerskill; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** jobseekerskill (  
 userid **bigint NOT NULL**,  
 skillid **bigint NOT NULL**);  
  
  
**ALTER TABLE** jobseekerskill **OWNER TO** postgres;  
  
--  
-- Name: message; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE message** (  
 messageid **bigint NOT NULL**,  
 from\_userid **bigint NOT NULL**,  
 to\_userid **bigint NOT NULL**,  
 reply\_messageid **bigint NOT NULL**,  
 **message character varying NOT NULL**,  
 create\_date date **NOT NULL**);  
  
  
**ALTER TABLE message OWNER TO** postgres;  
  
--  
-- Name: skill; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** skill (  
 skillid **bigint NOT NULL**,  
 skill\_name **character varying NOT NULL**);  
  
  
**ALTER TABLE** skill **OWNER TO** postgres;  
  
--  
-- Name: userparagon; Type: TABLE; Schema: public; Owner: postgres  
--  
  
**CREATE TABLE** userparagon (  
 userid **bigint NOT NULL**,  
 phone **character varying NOT NULL**,  
 email **character varying NOT NULL**,  
 profile\_picture\_url **character varying**,  
 first\_name **character varying NOT NULL**,  
 last\_name **character varying NOT NULL**,  
 street\_adress **character varying**,  
 city **character varying**,  
 state\_pronvince **character varying**,  
 country **character varying**,  
 zipcode **character varying**);  
  
  
**ALTER TABLE** userparagon **OWNER TO** postgres;  
  
--  
-- Data for Name: chatbot; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** chatbot (questionid, userid, question) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: chatbotanswer; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** chatbotanswer (applicationid, questionid, answer) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: company; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** company (companyid, company\_name, social\_media\_handle, company\_summary, company\_logo, company\_size, company\_website) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: employer; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** employer (userid, employer\_position) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: employment; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** employment (companyid, userid) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: institute; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** institute (instituteid, **name**) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobapplication; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobapplication (applicationid, job\_seekerid, jobid, apply\_date) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobcategory; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobcategory (categoryid, category\_name) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: joblist; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** joblist (jobid, userid, title, salary, post\_date, responsibility, time\_demand) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: joblistcategory; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** joblistcategory (jobid, categoryid) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobseeker; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobseeker (userid, summary, is\_relation\_ok, experience, premium\_level) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobseekercategory; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobseekercategory (userid, categoryid) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobseekercertificate; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobseekercertificate (userid, certificate\_name) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobseekereducation; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobseekereducation (userid, instituteid, start\_date, end\_date, degree\_name) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobseekerhonor; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobseekerhonor (userid, honor\_name) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: jobseekerskill; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** jobseekerskill (userid, skillid) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: message; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY message** (messageid, from\_userid, to\_userid, reply\_messageid, **message**, create\_date) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: skill; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** skill (skillid, skill\_name) **FROM stdin**;  
\.  
  
  
--  
-- Data for Name: userparagon; Type: TABLE DATA; Schema: public; Owner: postgres  
--  
  
**COPY** userparagon (userid, phone, email, profile\_picture\_url, first\_name, last\_name, street\_adress, city, state\_pronvince, country, zipcode) **FROM stdin**;  
\.  
  
  
--  
-- Name: chatbot chatbot\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** chatbot  
 **ADD CONSTRAINT** chatbot\_pkey **PRIMARY KEY** (questionid);  
  
  
--  
-- Name: chatbotanswer chatbotanswer\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** chatbotanswer  
 **ADD CONSTRAINT** chatbotanswer\_pkey **PRIMARY KEY** (applicationid, questionid);  
  
  
--  
-- Name: company company\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** company  
 **ADD CONSTRAINT** company\_pkey **PRIMARY KEY** (companyid);  
  
  
--  
-- Name: employer employer\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** employer  
 **ADD CONSTRAINT** employer\_pkey **PRIMARY KEY** (userid);  
  
  
--  
-- Name: employment employment\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** employment  
 **ADD CONSTRAINT** employment\_pkey **PRIMARY KEY** (companyid, userid);  
  
  
--  
-- Name: institute institute\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** institute  
 **ADD CONSTRAINT** institute\_pkey **PRIMARY KEY** (instituteid);  
  
  
--  
-- Name: jobapplication jobapplication\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobapplication  
 **ADD CONSTRAINT** jobapplication\_pkey **PRIMARY KEY** (applicationid);  
  
  
--  
-- Name: jobcategory jobcategory\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobcategory  
 **ADD CONSTRAINT** jobcategory\_pkey **PRIMARY KEY** (categoryid);  
  
  
--  
-- Name: joblist joblist\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** joblist  
 **ADD CONSTRAINT** joblist\_pkey **PRIMARY KEY** (jobid);  
  
  
--  
-- Name: joblistcategory joblistcategory\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** joblistcategory  
 **ADD CONSTRAINT** joblistcategory\_pkey **PRIMARY KEY** (jobid, categoryid);  
  
  
--  
-- Name: jobseeker jobseeker\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseeker  
 **ADD CONSTRAINT** jobseeker\_pkey **PRIMARY KEY** (userid);  
  
  
--  
-- Name: jobseekercategory jobseekercategory\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekercategory  
 **ADD CONSTRAINT** jobseekercategory\_pkey **PRIMARY KEY** (userid, categoryid);  
  
  
--  
-- Name: jobseekercertificate jobseekercertificate\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekercertificate  
 **ADD CONSTRAINT** jobseekercertificate\_pkey **PRIMARY KEY** (userid, certificate\_name);  
  
  
--  
-- Name: jobseekereducation jobseekereducation\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekereducation  
 **ADD CONSTRAINT** jobseekereducation\_pkey **PRIMARY KEY** (userid, instituteid);  
  
  
--  
-- Name: jobseekerhonor jobseekerhonor\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekerhonor  
 **ADD CONSTRAINT** jobseekerhonor\_pkey **PRIMARY KEY** (userid, honor\_name);  
  
  
--  
-- Name: jobseekerskill jobseekerskill\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekerskill  
 **ADD CONSTRAINT** jobseekerskill\_pkey **PRIMARY KEY** (userid, skillid);  
  
  
--  
-- Name: message message\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY message  
 ADD CONSTRAINT** message\_pkey **PRIMARY KEY** (messageid);  
  
  
--  
-- Name: skill skill\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** skill  
 **ADD CONSTRAINT** skill\_pkey **PRIMARY KEY** (skillid);  
  
  
--  
-- Name: userparagon userparagon\_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** userparagon  
 **ADD CONSTRAINT** userparagon\_pkey **PRIMARY KEY** (userid);  
  
  
--  
-- Name: chatbot chatbot\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** chatbot  
 **ADD CONSTRAINT** chatbot\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: chatbotanswer chatbotanswer\_applicationid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** chatbotanswer  
 **ADD CONSTRAINT** chatbotanswer\_applicationid\_fkey **FOREIGN KEY** (applicationid) **REFERENCES** jobapplication(applicationid);  
  
  
--  
-- Name: chatbotanswer chatbotanswer\_questionid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** chatbotanswer  
 **ADD CONSTRAINT** chatbotanswer\_questionid\_fkey **FOREIGN KEY** (questionid) **REFERENCES** chatbot(questionid);  
  
  
--  
-- Name: employer employer\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** employer  
 **ADD CONSTRAINT** employer\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: employment employment\_companyid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** employment  
 **ADD CONSTRAINT** employment\_companyid\_fkey **FOREIGN KEY** (companyid) **REFERENCES** company(companyid);  
  
  
--  
-- Name: employment employment\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** employment  
 **ADD CONSTRAINT** employment\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: jobapplication jobapplication\_job\_seekerid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobapplication  
 **ADD CONSTRAINT** jobapplication\_job\_seekerid\_fkey **FOREIGN KEY** (job\_seekerid) **REFERENCES** jobseeker(userid);  
  
  
--  
-- Name: jobapplication jobapplication\_jobid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobapplication  
 **ADD CONSTRAINT** jobapplication\_jobid\_fkey **FOREIGN KEY** (jobid) **REFERENCES** joblist(jobid);  
  
  
--  
-- Name: joblist joblist\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** joblist  
 **ADD CONSTRAINT** joblist\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** employer(userid);  
  
  
--  
-- Name: joblistcategory joblistcategory\_categoryid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** joblistcategory  
 **ADD CONSTRAINT** joblistcategory\_categoryid\_fkey **FOREIGN KEY** (categoryid) **REFERENCES** jobcategory(categoryid);  
  
  
--  
-- Name: joblistcategory joblistcategory\_jobid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** joblistcategory  
 **ADD CONSTRAINT** joblistcategory\_jobid\_fkey **FOREIGN KEY** (jobid) **REFERENCES** joblist(jobid);  
  
  
--  
-- Name: jobseeker jobseeker\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseeker  
 **ADD CONSTRAINT** jobseeker\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: jobseekercategory jobseekercategory\_categoryid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekercategory  
 **ADD CONSTRAINT** jobseekercategory\_categoryid\_fkey **FOREIGN KEY** (categoryid) **REFERENCES** jobcategory(categoryid);  
  
  
--  
-- Name: jobseekercategory jobseekercategory\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekercategory  
 **ADD CONSTRAINT** jobseekercategory\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** jobseeker(userid);  
  
  
--  
-- Name: jobseekercertificate jobseekercertificate\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekercertificate  
 **ADD CONSTRAINT** jobseekercertificate\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** jobseeker(userid);  
  
  
--  
-- Name: jobseekereducation jobseekereducation\_instituteid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekereducation  
 **ADD CONSTRAINT** jobseekereducation\_instituteid\_fkey **FOREIGN KEY** (instituteid) **REFERENCES** institute(instituteid);  
  
  
--  
-- Name: jobseekereducation jobseekereducation\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekereducation  
 **ADD CONSTRAINT** jobseekereducation\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: jobseekerhonor jobseekerhonor\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekerhonor  
 **ADD CONSTRAINT** jobseekerhonor\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** jobseeker(userid);  
  
  
--  
-- Name: jobseekerskill jobseekerskill\_skillid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekerskill  
 **ADD CONSTRAINT** jobseekerskill\_skillid\_fkey **FOREIGN KEY** (skillid) **REFERENCES** skill(skillid);  
  
  
--  
-- Name: jobseekerskill jobseekerskill\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY** jobseekerskill  
 **ADD CONSTRAINT** jobseekerskill\_userid\_fkey **FOREIGN KEY** (userid) **REFERENCES** jobseeker(userid);  
  
  
--  
-- Name: message message\_from\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY message  
 ADD CONSTRAINT** message\_from\_userid\_fkey **FOREIGN KEY** (from\_userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: message message\_to\_userid\_fkey; Type: FK CONSTRAINT; Schema: public; Owner: postgres  
--  
  
**ALTER TABLE ONLY message  
 ADD CONSTRAINT** message\_to\_userid\_fkey **FOREIGN KEY** (to\_userid) **REFERENCES** userparagon(userid);  
  
  
--  
-- Name: SCHEMA public; Type: ACL; Schema: -; Owner: postgres  
--  
  
**GRANT ALL ON SCHEMA public TO PUBLIC**;  
  
  
--  
-- PostgreSQL database dump complete  
--

**SQL Queries**

Query 1:

**SELECT** u.first\_name **AS** first\_name, u.last\_name **AS** last\_name,  
 u.profile\_picture\_url **AS** profile\_image\_URL, **m**.message **AS** message\_content, **m**.create\_date **AS** message\_date  
 **FROM** userparagon u, employer e, **message m  
 WHERE** e.userid = *cast*(90109 **AS BIGINT**) **AND m**.to\_userid = e.userid **AND** u.userid = **m**.from\_userid  
 **ORDER BY m**.create\_date **DESC  
 LIMIT** 5;

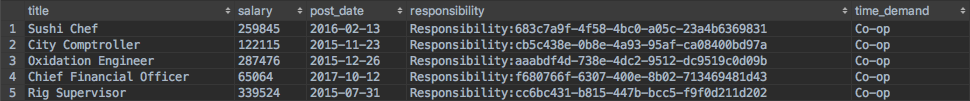
5 rows retrieved starting from 1 in 111ms (execution: 58ms, fetching: 53ms)



Query 2:

**SELECT** jl.title **AS** title, jl.salary **AS** salary, jl.post\_date **AS** post\_date,  
 jl.responsibility **AS** responsibility, jl.time\_demand **AS** time\_demand  
 **FROM** employer e, joblist jl, jobapplication ja  
 **WHERE** e.userid = *cast*(90196 **AS BIGINT**) **AND** e.userid = jl.userid **AND** jl.jobid = ja.jobid  
 **GROUP BY** jl.jobid  
 **ORDER BY** *count*(ja.applicationid) **DESC  
 LIMIT** 5;

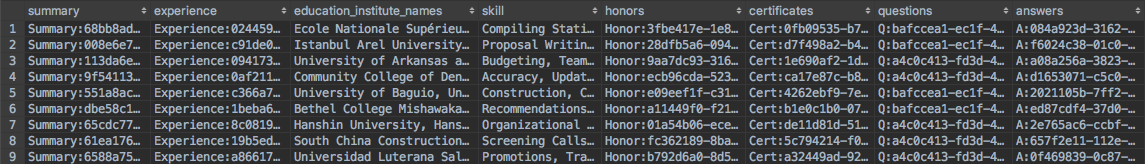
5 rows retrieved starting from 1 in 90ms (execution: 58ms, fetching: 32ms)



Query 3:

**SELECT** js.summary **AS** summary, js.experience **AS** experience,  
 *string\_agg*(i.name, ', ') **as** education\_institute\_names, *string\_agg*(**s**.skill\_name, ', ') **AS** skill,  
 *string\_agg*(jsh.honor\_name, ', ') **as** honors, *string\_agg*(jsc.certificate\_name, ', ') **as** certificates,  
 *string\_agg*(**c**.question, ', ') **AS** questions, *string\_agg*(ca.answer, ', ') **AS** answers  
 **FROM** employer e, joblist jl, jobapplication ja, jobseeker js, chatbotanswer ca, chatbot **c**,  
 jobseekereducation jse, institute i, jobseekerskill jss, skill **s**,  
 jobseekerhonor jsh, jobseekercertificate jsc  
 **WHERE** e.userid = *cast*(90196 **AS BIGINT**) **AND** jl.userid = e.userid **AND** jl.jobid = *cast*(4401 **AS BIGINT**) **AND** jl.jobid = ja.jobid **AND** ja.applicationid = ca.applicationid **and** ca.questionid = **c**.questionid **AND** ja.job\_seekerid = js.userid **AND** js.userid = jsc.userid **AND** js.userid = jse.userid **AND** jse.instituteid = i.instituteid **AND** js.userid = jss.userid **AND** jss.skillid = **s**.skillid **AND** js.userid = jsh.userid  
 **GROUP BY** js.userid

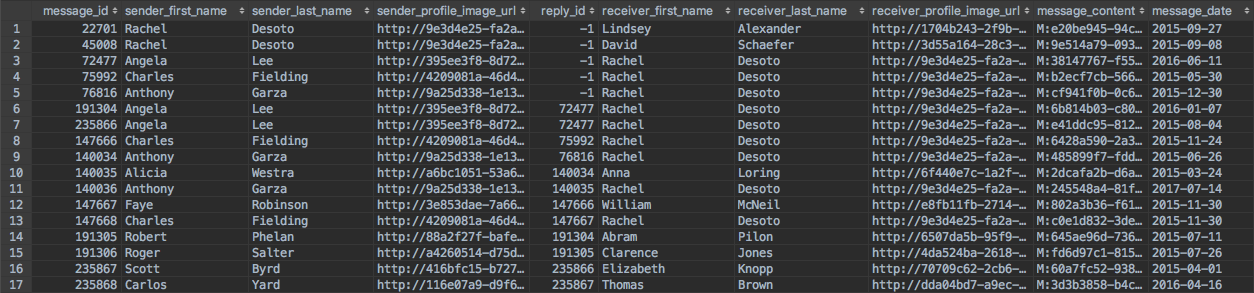
9 rows retrieved starting from 1 in 189ms (execution: 131ms, fetching: 58ms)



Query 4:

**WITH RECURSIVE** MessageCTE **AS** (  
 (  
 **SELECT** m1.\*  
 **FROM message** m1  
 **WHERE** (m1.from\_userid = *cast*(1 **AS BIGINT**) **OR** m1.to\_userid = *cast*(1 **AS BIGINT**)) **AND** m1.reply\_messageid = *cast*(-1 **AS BIGINT**)  
 )  
 **UNION ALL** (  
 **SELECT** m2.\*  
 **FROM message** m2  
 **INNER JOIN** MessageCTE mcte  
 **ON** m2.reply\_messageid = mcte.messageid  
 )  
)  
**SELECT DISTINCT m**.messageid **AS** message\_ID,  
 **s**.first\_name **AS** sender\_first\_name, **s**.last\_name **AS** sender\_last\_name, **s**.profile\_picture\_url **AS** sender\_profile\_image\_URL,  
 **m**.reply\_messageid **AS** reply\_ID,   
 r.first\_name **AS** receiver\_first\_name, r.last\_name **AS** receiver\_last\_name, r.profile\_picture\_url **AS** receiver\_profile\_image\_URL,  
 **m**.message **as** message\_content, **m**.create\_date **as** message\_date  
 **FROM** MessageCTE **m**, userparagon **s**, userparagon r  
 **WHERE m**.from\_userid = **s**.userid **AND m**.to\_userid = r.userid  
 **ORDER BY m**.reply\_messageid **ASC**, **m**.messageid **ASC**

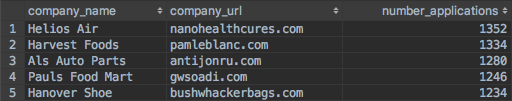
17 rows retrieved starting from 1 in 386ms (execution: 325ms, fetching: 61ms)



Query 5:

**SELECT c**.company\_name **AS** company\_name, **c**.company\_website **AS** company\_URL, *count*(ja.job\_seekerid) **AS** number\_applications  
 **FROM** company **c**, employment et, employer er, joblist jl, jobapplication ja  
 **WHERE c**.companyid = et.companyid **AND** et.userid = er.userid **AND** er.userid = jl.userid **AND** jl.jobid = ja.jobid **AND** ja.apply\_date >= '2015-01-01' **AND** ja.apply\_date < '2019-01-01'  
 **GROUP BY c**.company\_name, **c**.company\_website  
 **ORDER BY** *count*(ja.job\_seekerid) **DESC  
 LIMIT** 5;

5 rows retrieved starting from 1 in 389ms (execution: 345ms, fetching: 44ms)



Query 6:

**SELECT** jc.category\_name **AS** job\_category,  
 *cast*(*count*(**DISTINCT** jlc.jobid) **AS FLOAT**) / *cast*(*count*(ja.applicationid) **AS FLOAT**) **as** market\_vacancy  
 **FROM** jobcategory jc, joblistcategory jlc, jobapplication ja  
 **WHERE** jc.categoryid = jlc.categoryid **AND** jlc.jobid = ja.jobid  
 **GROUP BY** jc.categoryid  
 **ORDER BY** *cast*(*count*(**DISTINCT** jlc.jobid) **AS FLOAT**) / *cast*(*count*(ja.applicationid) **AS FLOAT**) **DESC  
 LIMIT** 5;

5 rows retrieved starting from 1 in 207ms (execution: 192ms, fetching: 15ms)

