

- ένα πλήρες διάγραμμα οντοτήτων-σχέσεων για την εταιρία

ER\_diagram.pdf

-τα γνωρίσματα (όνομα, τύπος) όλων των οντοτήτων και σχέσεων :

Company:

name	type
Cid	int (11)
c_name	char(20)
c_account_num	bigint(20)
c_credit_info	char(20)

Store

City	int(11)
c_addr_num	int(11)
c_addr	char(20)
c_phone	bigint(20)
c_email	char(20)

Jobs

Jid	int(11)
work_hours	char(20)
Salary	int(11)
j_work	char(20)
deadline	char(20)

Job\_languages

Language	char(20)
----------	----------

Job\_skills

Skill	char(20)
-------	----------

Job\_titles

Title	char(20)
-------	----------

Individuals

iid	int(11)
i_name	char(20)
i_phone	bigint(20)
i_email	char(30)

i_addr_num	int(11)
i_job	char(20)
i_account_num	big_int(20)
i_credit_info	char(20)
available	char(20)

#### Languages

Language	char(20)
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#### Skills

Skill	char(20)
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#### Titles

Title	char(20)
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- τα πρωτεύοντα κλειδιά

cid, city, iid, jid

- επεξηγήσεις για τα μη-προφανή γνωρίσματα και τις μη-προφανείς σχέσεις

Οντοτητα Store:

Καθε εταιρια μπορεί να εχει ενα ή περισσοτερα καταστηματα σε πόλεις.

Γνωρισμα city :

Το χρησιμοποιουμε ως πρωτευον κλειδί για τα καταστηματα, καθε εταιρια μπορεί να εχει ενα καταστημα σε μια πολη το οποιο προσφερει μια ή περισσότερες δουλειες, το γνωρισμα City ειναι η πολη αυτη.

Γνωρισμα j\_work:

Απαιτουμενο επαγγελμα εργασιας.

Γνωρισμα i\_job:

Επάγγελμα ιδιώτη.

Σχεση Hire :

Αναλογα τις απαιτησεις μιας δουλειάς (job) και τα προσοντα ενως ιδιοτη (individual)  
( j\_work = i\_job ? ...) γινεται αντιστοιχηση του ιδιοτη με τις ζητουμενες απαιτησεις.

- περιορισμούς πληθικότητας

+ Στο pdf του διαγράμματος ροής ER\_diagram.pdf.

#### Offer job

Ενα καταστημα προσφερει απο 0-N δουλειες (δεν προσδιορίζεται).

Μια συγκεκριμένη δουλεια ομως προσφερεται απο 1 καταστημα (1-1).

#### Demanded Language

Μια εργασια ζηταιει απο 0-N γλωσσες (δεν προσδιορίζεται).

Μια γλωσσα μπορεί να ζητειται απο 0-N εργασιες (δεν προσδιορίζεται).

#### Demanded title,skills

Οπως Demanded Language

#### Hire

Μια θεση εργασιας αφορα (θα προσλάβει) εναν ιδιωτη 1-1.

Ενας ιδιωτης θα καταλαβει μια θεση εργασιας 1-1.

- τη μετάφραση του μοντέλου σας στο σχεσιακό μοντέλο

#### Company

<u>Cid</u>	c_name	c_account_num	c_credit_info
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#### Store

<u>City</u>	<u>Cid</u>	c_addr	c_phone	c_email
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#### Job

<u>Jid</u>	work_hours	Deadline	Salary	j_work
------------	------------	----------	--------	--------

#### Demanded Languages

<u>Jid</u>	<u>Language</u>
------------	-----------------

#### Demanded Skills

<u>Jid</u>	<u>skill</u>
------------	--------------

#### Demanded Title

<u>Jid</u>	<u>Title</u>
------------	--------------

#### Job Languages

<u>Language</u>
-----------------

#### Job Title

<u>Title</u>
--------------

## Job Skill

<u>Skill</u>
--------------

## Individual

iid	i_addr_num	i_addr	i_acc_num	i_job	i_name	i_phone	i_email	i_credit_info	available
-----	------------	--------	-----------	-------	--------	---------	---------	---------------	-----------

Languages/titles/skills όπως Jobs Languages/skills/titles...

- τις εντολές της γλώσσας ορισμού δεδομένων για τις σχέσεις που προκύπτουν

## Company

In main:

```
sql[3] = "CREATE TABLE company(cid integer NOT NULL AUTO_INCREMENT,c_name char(20) NOT NULL , c_account_num BIGINT, c_credit_info char(20) NOT NULL , PRIMARY KEY (cid))";
```

## Individuals

In main:

```
sql[0] = "CREATE TABLE individuals(iid integer NOT NULL AUTO_INCREMENT ,i_name char(20) NOT NULL ,i_phone BIGINT , i_email char(30) ,i_addr_num integer , i_addr char(20) NOT NULL , i_job char(20) NOT NULL , i_account_num BIGINT , i_credit_info char(20) NOT NULL ,available char(20) NOT NULL , PRIMARY KEY(iid) )";
```

## Jobs

In main:

```
sql[6] = "CREATE TABLE jobs(jid integer NOT NULL AUTO_INCREMENT ,cid integer NOT NULL , city char(20) NOT NULL , work_hours char(20) NOT NULL, salary integer NOT NULL,j_work char(20) NOT NULL ,deadline char(20) NOT NULL, FOREIGN KEY(cid , city) REFERENCES store(cid , city) on DELETE CASCADE on UPDATE CASCADE ,PRIMARY KEY(jid) )";
```

## Store

In main:

```
sql[5] = " CREATE TABLE store(cid integer NOT NULL,city char(20) NOT NULL ,c_addr_num integer , c_addr char(20) NOT NULL ,c_phone BIGINT , c_email char(20), FOREIGN KEY(cid) REFERENCES company(cid) on DELETE CASCADE on UPDATE CASCADE , PRIMARY KEY(cid, city) )";
```

## Job Languages

In main:

```
sql[9] = "CREATE TABLE job_languages(jid integer NOT NULL , language char(20) NOT NULL, FOREIGN KEY(jid) REFERENCES jobs(jid) on DELETE CASCADE on UPDATE CASCADE )";
```

### Job Skills

In main:

```
sql[8] = "CREATE TABLE job_skills(jid integer NOT NULL , skill char(20) NOT NULL,  
FOREIGN KEY(jid) REFERENCES jobs(jid) on DELETE CASCADE on UPDATE  
CASCADE )";
```

### Job Titles

In main:

```
sql[7] = "CREATE TABLE job_titles(jid integer NOT NULL , title char(20) NOT NULL,  
FOREIGN KEY(jid) REFERENCES jobs(jid) on DELETE CASCADE on UPDATE  
CASCADE )";
```

Languages/Skills/Titles ίδια με Job Languages/Skills/Titles αλλά με iid αντί για jid.

- περιορισμούς ακεραιότητας και συναρτησιακές εξαρτήσεις

Όλα τα κλειδιά θα πρέπει να μην είναι κενά (null)

Υποψηφία κλειδιά : iid, jid, cid, city.

Τα ονόματα όπως i\_name, c\_name δεν γίνεται να είναι κενά.

Τα γνωρίσματα τα οποία είναι απαραίτητα για τις διαδικασίες δεν γίνεται να είναι κενά, όπως: i\_addr, i\_job, available, work\_hours, salary, j\_work, c\_addr.

Απαιτείται πιστωτική κάρτα για την πληρωμή του λογαριασμού στην εταιρία.

Αρα τα c\_credit\_info, i\_credit\_info δεν μπορεί να είναι κενά.

- καθορισμό κλειδιών των σχέσεων βάσει των συναρτησιακών εξαρτήσεων

Υποψηφία κλειδιά : iid, jid, cid, city, language, skill, title.

Κλειδί : iid jid city cid

- μετατροπή του μοντέλου σε τρίτη κανονική μορφή με διατήρηση των συναρτησιακών εξαρτήσεων και χωρίς απώλεια πληροφορίας

Για τις επιχειρήσεις:

Χωρίς δομή:

Cid	c_name	c_acc_num	c_credit_in fo	City	c_addr	c_phone	c_email
Jid	work_hour s	Deadline	Salary	j_work	Languages	Titles	skills

Πχ ένα στιγμιότυπο του titles μπορεί να είναι : title1, title2, title3

Τα πεδία skills, languages, titles είναι πλειοτιμα. Για να πάμε σε 1NF θα πρέπει τα πλειοτιμα πεδία να σπασούν σε extra tables.

Οποτε:

το αρχικο table σπαι σε :

Cid	c_name	c_acc_num	c_credit_inf o	City	c_addr	c_phone
Jid	work_hour	Deadline	Salary	Jwork		

Cid	Language
-----	----------

Cid	Skill
-----	-------

Cid	Title
-----	-------

Ιδια διαδικασία και για το individual:

Iid	...	Languages	Skills	Titles
-----	-----	-----------	--------	--------

Σπαι σε

Iid	...
-----	-----

Οπου ... → i\_addr\_num , i\_addr, i\_acc\_num, i\_job ...

iid	Language
-----	----------

iid	Skill
-----	-------

iid	Title
-----	-------

Συναρτησιακες εξαρτησεις

Company

cid → c\_name, c\_account\_num, c\_credit\_info

cid, city → c\_addr , c\_phone , c\_email

cid , jid, city → work\_hours, deadline, salary, j\_work

jid → language, title, skill

## Individual

iid → i\_addr\_num, i\_addr, i\_acc\_num, i\_job, i\_name, i\_phone, i\_email, i\_credit\_info, available  
iid → language, title, skill

Για την μετατροπή σε 2NF θα πρέπει τα table να οργανωθούν σύμφωνα με τις πλήρεις συναρτησιακές εξαρτήσεις

Οποτε:

τα table για το Company σπανε σε

## Company

<u>Cid</u>	c_name	c_account_num	c_credit_info
------------	--------	---------------	---------------

## Store

<u>cid</u>	<u>City</u>	c_addr	c_phone	c_email
------------	-------------	--------	---------	---------

## Job

<u>jid</u>	<u>City</u>	<u>Cid</u>	work_hours	Deadline	Salary	j_work
------------	-------------	------------	------------	----------	--------	--------

## Job Language

<u>Jid</u>	Language
------------	----------

## Job Skills

<u>Jid</u>	Skill
------------	-------

## Job title

<u>Jid</u>	Title
------------	-------

Το individual table είναι έτοιμο καθώς όλα τα γνωρίσματα του εξαρτώνται πλήρως από το iid.

Για την μετατροπή σε 3NF θα πρέπει να εξαλειφθούν οι μεταβατικές συναρτησιακές εξαρτήσεις όμως στο συγκεκριμένο παράδειγμα δεν υπάρχει καμία, άρα είναι σε 3NF.

Diadikasia1: Η υλοποίησή σε sql γίνεται με μία insert στο table 'jobs' εντολή (1) και μίας insert για κάθε title(2), language(3), skill(4) που έχει ως απαιτήση η εργασία να κατέχει ο ιδιώτης στα αντίστοιχα tables job\_titles, job\_languages, job\_skills

```
(1)String sql="INSERT INTO jobs(cid, city, work_hours , salary,j_work,deadline)
VALUES(given_cid,given_city,given_work_hours,given_salary,given_j_work,given_deadline)"
(2)String sql="INSERT INTO job_titles(jid,title) VALUES(given_jid,given_title)"
(3)String sql="INSERT INTO job_languages(jid,language) VALUES(given_jid,given_language)"
(4)String sql="INSERT INTO job_skills(jid,skill) VALUES(given_jid,given_skill)"
```

Diadikasia2: Η υλοποίησή σε sql γίνεται με μία insert στο table 'individual'(1) και μίας insert για κάθε title(2), language(3), skill(4) που κατέχει ο ιδιώτης στα αντίστοιχα tables titles, languages, skills

```
(1)String sql="INSERT INTO individuals(i_name, i_phone,i_email, i_addr_num, i_addr,
i_job, i_account_num, i_credit_info,available)
```

```
VALUES("given_name,given_phone,given_email
,
given_addr_num,given_addr,given_job_given_account_num,given_credit_info,given_available
"
```

```
(2)String sql="INSERT INTO titles(iid,title) VALUES(given_iid,given_title)"
(3)String sql="INSERT INTO languages(iid,language) VALUES(given_iid,given_language)"
(4)String sql="INSERT INTO skills(iid,skill) VALUES(given_iid,given_skill)"
```

Diadikasia3:Arxika ekteleitai h entolh (1) me thn opoia pairnoume tous sunduasmous kleidiwn iid , jid gia tou opoious ta pedia douleia kai dia8esimothta tairiazoun.Epeita sugkrinoume gia ton ka8e auto sunduasma an ikanopoountai ta kritiria tw n titlwn(entoles (2),(3)) , de3iothtw n(entoles (4), (5)) kai glwsswn(entoles (6),(7)) pou apaitei h sugkekrimenh ergasia

```
(1)String sql="SELECT jid,iid FROM jobs INNER JOIN individuals ON j_work=i_job AND
available<=deadline";
```

```
(2)String sql="SELECT jid, iid, COUNT(iid) FROM titles INNER JOIN job_titles ON
job_titles.title=titles.title AND job_titles.jid=given_jid AND titles.iid=given_iid
GROUP BY jid,iid"
```

```
(3)String sql="SELECT jid,COUNT(title) FROM job_titles WHERE jid=given_jid GROUP BY jid"
```

```
(4)String sql="SELECT jid, iid, COUNT(iid) FROM skills INNER JOIN job_skills ON
job_skills.skill=skills.skill AND job_skills.jid=given_jid AND skills.iid=given_iid
GROUP BY jid,iid"
```

```
(5)String sql="SELECT jid,COUNT(skill) FROM job_skills WHERE jid=given_jid GROUP BY jid"
```

```
(6)String sql="SELECT jid, iid, COUNT(iid) FROM languages INNER JOIN job_languages ON
job_languages.language=languages.language AND job_languages.jid=given_language AND
languages.iid=given_iid GROUP BY jid,iid"
```

```
(7)String sql="SELECT jid,COUNT(language) FROM job_languages WHERE jid=given_jid GROUP BY
jid";
```

Diadikasia4:Arxika ekteleitai h Diadikasia3("Tairiasma prosforas kai zhthses") kai sth sunexeia otan mia etairia kanei proslhpsh enan idiwth ekteleitai mia entolh diagrafhs sto table 'individuals'

(2)kai mia sto table 'jobs' (1)kai ta kleidia tous (cid,jid, iid) ginontai insert sto table 'history'

```
(1)String sql="DELETE FROM jobs WHERE jid=given_jid"
```

```
(2)String sql="DELETE FROM individuals WHERE iid=given_iid"
```

```
(3)String sql="INSERT INTO history(cid,jid,iid) VALUES(given_cid,given_jid,given_iid)"
```

Diadikasia5:Arxika vriskoume posses douleies proferei h sugkekrimenh etairia auth th stigmh apo to table 'jobs' me thn entolh (1) kai posses profere kai exoun hdh kaluf8ei apo to table 'history' me thn entolh (2)

```
(1)String sql="SELECT COUNT(jid) FROM jobs WHERE (cid=given_cid"
```

```
(2)String sql="SELECT COUNT(jid) FROM history WHERE cid=given_cid"
```

Diadikasia6:(i)Ousiastika ekteleitai h Diadikasia3 alla me thn entolh (1) na metatrepetai sthn akolou8h wste na mas epistrepsei apotelesmata mono gia to do8en iid

```
(1)String sql="SELECT jid,iid FROM jobs INNER JOIN individuals ON j_work=i_job AND
available<=deadline AND jobs.jcid=given_cid";
```

(ii)Ousiastika ekteleitai h Diadikasia3 alla me thn entolh (1) na metatrepetai sthn akolou8h wste na mas epistrepsei apotelesmata mono gia to do8en cid

```
(1)String sql="SELECT jid,iid FROM jobs INNER JOIN individuals ON j_work=i_job AND
available<=deadline AND individuals.iid=given_iid"
```

Diadikasia7:Arxika ekteleitai h entolh (1) gia na mas epistrepsei aggelies pou exei vre8ei ergazomenos ,sth sunexeia h entolh (2) gia na mas epistrepsei aggelies pou den exei vre8ei akoma ergazomenos kai telos oi entoles (3),(4) pou mas dinoun ton ari8mo tw n aggeliwn pou exei vre8ei kai den exei vre8ei ergazomenos antistoixa gia na paroume ta pososta.

```
(1)String sql="SELECT * FROM history";
```

```
(2)String sql="SELECT * FROM jobs";
```

```
(3)String sql="SELECT COUNT(jid) FROM history";
```

```
(4)String sql="SELECT COUNT(jid) FROM jobs";
```



# MANUAL

## Request

### 1. Sign up: Eggrafh ws melos ths etairias

Ta melh sumplhrwnoun ta stoixeia tous ( onoma, diefthinsh, thlefwno, email, arithmo logarias mou kai stoixeia pistwtikhsh) ki epeita epilegoun th kathgoria sthn opoia anhkoun (company, individuals or new store). Bash ths epiloghstou o xrhsths sumplhrwnei ta eidika gnwrismata ths kathe kathgorias (polh gia to company, to id, polh kai loipes leptomeries gia to neo katasthma kai epaggelma gia tous individuals. Kata to telos ths eggrafhs parexetai to anagnwristiko gia to neo melos.

### 2. offer job: Anarthsh neas thesis

H endiaferomenh etairia sumplhrwnei to anagnwristiko pou ths dwthike kata thn eggrafh ths, th polh sthn opoia prosferei thn ergasia auth, to eidos ths ergasias ka8ws kai alles leptomeries opws o misthos, to wrario kai h prothesmia

### 3. add request: Aithma idiwth gia thesi ergasias

O idiwths sumplhrwnei to anagnwristiko pou elabe kata thn eggrafh kathws kai thn hmeromhnia apo thn opoia einai diathesimos. An to pedio den sumplhrwthei thewreita diathesimos apo th stigmh pou kanei thn aithsh

### 4. supply and demand: tairiasma prosforas kai zhthshs

Kata th leitourgia auth parousiazetai enas katalogos me tous katallhlous idiwtas gia kathe prosferomenh thesi ergasias.

### 5. contact with companies: Epikoinwnia etairias me idiwtas

Arxika parexetai ena tairiasma metaksu prosforas kai zhthshs wste na broun poioi upalhloi tairiazoun stis douleies pou prosferoun. Epeita mporoun an proboun se proslhpseis anagrafontas to anagnwristiko tous kathws kai ekeino tou idiwth pou epithimoun

### 6. pay: Plhrwmh

O endiaferomenos sumplhrwnei to anagnwristiko tou kai sth sunexeia an einai idiwths h etairia. Sth periptwsh plhrwmhs apo etairia upologizetai kai h ektwsh ths

### 7. find job: Erwthseis

O endiaferomenos sumplhrwnei to anagnwristiko tou kai sth sunexeia an einai idiwths h etairia. Analoga me thn epilogh emfanizontsai oi katallhles douleies gia aithsh/proslhpsh.

## Help

### 1. Syatem Information

Sth leitourgia auth emfanizontai oles oi plhrofories gia douleies pou exoun kalufthei h ekremmoun mesw ths HeadHunters. Epishs, emfanizontai ta pososta epituxeias.

## Tables company kai store prin thn insert

	cid	c_name	c_account_num	c_credit_info
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	cosmote	1200000000	credit_info_0
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	vodafone	1000000001	credit_info_1
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	wind	2000000002	credit_info_2
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	HadHunters	0	headhunters_3
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	cyta	4000000004	credit_info_4
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	forthnet	5000000005	credit_info_5
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	germanos	6000000006	credit_info_6
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	media-markt	7000000007	credit_info_7
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	lg	8000000008	credit_info_8
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	plaisio	9000000009	credit_info_9

	cid	city	c_addr_num	c_addr	c_phone	c_email
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	hrakleio	123	address0	6971916010	csd3031@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	ierapetra	44	address1	6971916020	csd3131@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	mouxtaro	76	address2	6971916030	csd3231@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	hrakleio	986	address3	6971916400	csd3331@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	korinos	342	address4	6971916050	csd3431@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	hrakleio	98	address5	6971916060	csd3531@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	xwrio	676	address6	6971916070	csd3631@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	hrakleio	221	address7	6971916080	csd3731@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	hrakleio	8786	address8	6971916090	csd3831@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	hrakleio	765	address9	69719160100	csd3931@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	hrakleio	432	address10	6971916011	csd3101@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	hrakleio	1223	address11	6971916012	csd3111@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	hrakleio	999	address12	69719160113	csd3121@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	arkaloxwri	980	address14	69719160015	csd3141@csd.uoc.gr
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	hrakleio	888	address13	69719160014	csd3131@csd.uoc.gr

## Diadikasia ths insert

NAME

andreas

ADDRESS

xarilaou

ADDRESS NUMBER

99

PHONE

2842011111

E-MAIL

csd0000@baseis.com

ACCOUNT NUMBER

1231231231

CREDIT CARD LINE

credit\_info

COMPANY

ADD STORE

INDIVIDUAL

eisagwgh ths polhs pou vrisketai to katasthma

CITY

katw xwrio

emfanish tou id pou sou dinei h bash

To id sou einai 11

tables company kai store meta thn insert

	cid	c_name	c_account_num	c_credit_info
<input type="checkbox"/> Edit Copy Delete	1	cosmote	1200000000	credit_info_0
<input type="checkbox"/> Edit Copy Delete	2	vodafone	1000000001	credit_info_1
<input type="checkbox"/> Edit Copy Delete	3	wind	2000000002	credit_info_2
<input type="checkbox"/> Edit Copy Delete	4	HadHunters	0	headhunters_3
<input type="checkbox"/> Edit Copy Delete	5	cyta	4000000004	credit_info_4
<input type="checkbox"/> Edit Copy Delete	6	forthnet	5000000005	credit_info_5
<input type="checkbox"/> Edit Copy Delete	7	germanos	6000000006	credit_info_6
<input type="checkbox"/> Edit Copy Delete	8	media-markt	7000000007	credit_info_7
<input type="checkbox"/> Edit Copy Delete	9	lg	8000000008	credit_info_8
<input type="checkbox"/> Edit Copy Delete	10	plaisio	9000000009	credit_info_9
<input type="checkbox"/> Edit Copy Delete	11	andreas	1231231231	credit_info

	cid	city	c_addr_num	c_addr	c_phone	c_email
<input type="checkbox"/> Edit Copy Delete	1	hrakleio	123	address0	6971916010	csd3031@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	1	ierapetra	44	address1	6971916020	csd3131@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	1	mouxtaro	76	address2	6971916030	csd3231@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	2	hrakleio	986	address3	6971916400	csd3331@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	2	korinos	342	address4	6971916050	csd3431@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	3	hrakleio	98	address5	6971916060	csd3531@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	3	xwrio	676	address6	6971916070	csd3631@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	4	hrakleio	221	address7	6971916080	csd3731@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	5	hrakleio	8786	address8	6971916090	csd3831@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	6	hrakleio	765	address9	69719160100	csd3931@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	7	hrakleio	432	address10	6971916011	csd3101@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	8	hrakleio	1223	address11	6971916012	csd3111@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	9	hrakleio	999	address12	69719160113	csd3121@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	10	arkaloxwri	980	address14	69719160015	csd3141@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	10	hrakleio	888	address13	69719160014	csd3131@csd.uoc.gr
<input type="checkbox"/> Edit Copy Delete	11	katw xwrio	99	xanilaou	2842011111	csd0000@baseis.com

## offer job

table jobs prin

jid	cid	city	work_hours	salary	j_work	deadline
1	1	hrakleio	work_hours1	2432	psaras	2015/01/12
2	1	hrakleio	work_hours2	6867	psaras	2015/04/20
3	1	ierapetra	work_hours3	56756	agroths	2016/03/08
4	2	hrakleio	work_hours4	5455	job21	2017/09/08
5	2	korinos	work_hours5	9988	job26	2017/05/07
6	6	hrakleio	work_hours6	7645	job03	2016/09/09
7	10	arkaloxwri	work_hours7	1211	job93	2018/06/06
8	1	hrakleio	work_hours8	87961	job11	2016/05/05
9	1	hrakleio	work_hours8	87961	job	2222/05/05
10	1	mouxtaro	work_hours8	87961	pcdoc	2222/05/05

table jobs meta

	jid	cid	city	work_hours	salary	j_work	deadline
<input type="checkbox"/> Edit Copy Delete	1	1	hrakleio	work_hours1	2432	psaras	2015/01/12
<input type="checkbox"/> Edit Copy Delete	2	1	hrakleio	work_hours2	6867	psaras	2015/04/20
<input type="checkbox"/> Edit Copy Delete	3	1	ierapetra	work_hours3	56756	agroths	2016/03/08
<input type="checkbox"/> Edit Copy Delete	4	2	hrakleio	work_hours4	5455	job21	2017/09/08
<input type="checkbox"/> Edit Copy Delete	5	2	korinos	work_hours5	9988	job26	2017/05/07
<input type="checkbox"/> Edit Copy Delete	6	6	hrakleio	work_hours6	7645	job03	2016/09/09
<input type="checkbox"/> Edit Copy Delete	7	10	arkaloxwri	work_hours7	1211	job93	2018/06/06
<input type="checkbox"/> Edit Copy Delete	8	1	hrakleio	work_hours8	87961	job11	2016/05/05
<input type="checkbox"/> Edit Copy Delete	9	1	hrakleio	work_hours8	87961	job	2222/05/05
<input type="checkbox"/> Edit Copy Delete	10	1	mouxtaro	work_hours8	87961	pcdoc	2222/05/05
<input type="checkbox"/> Edit Copy Delete	12	11	katw xwrio	12:00-12:00	9000	pilotos	2017/10/20

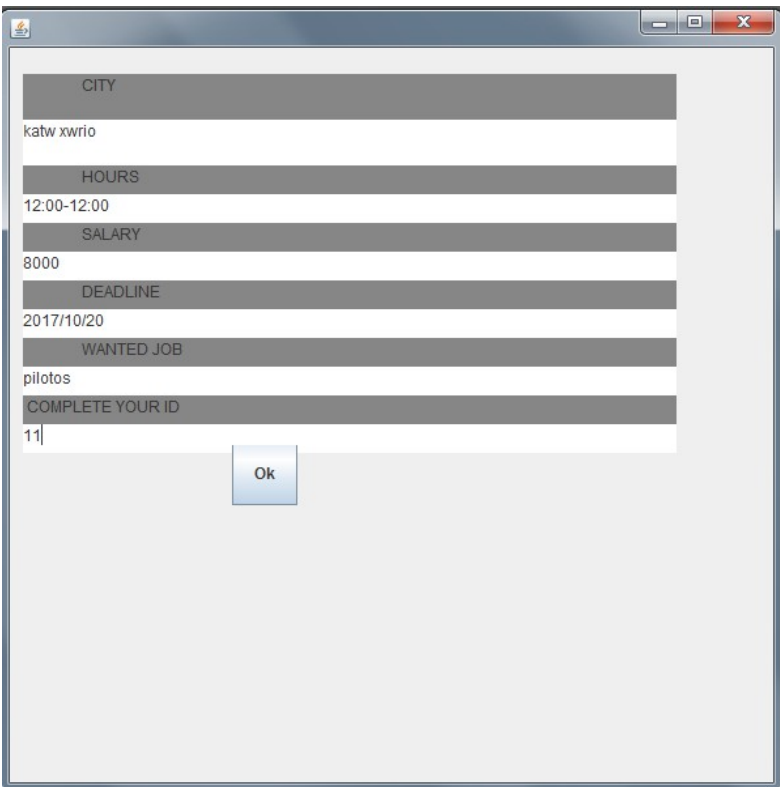
job\_titles,job\_languages,job\_skills prin

jid	language	jid	skill	jid	title
1	LANGUAGE1	1	ABILITY1	1	TITLE1
2	LANGUAGE2	1	ABILITY2	2	TITLE1
3	LANGUAGE4	2	ABILITY1	3	TITLE1
3	LANGUAGE1	3	ABILITY5	4	TITLE2
4	LANGUAGE7	4	ABILITY6	5	TITLE2
5	LANGUAGE6	5	ABILITY8	6	TITLE1
6	LANGUAGE4	5	ABILITY10	7	TITLE1
9	LANGUAGE4	6	ABILITY10	9	TITLE4
10	LANGUAGE3	7	ABILITY10	10	TITLE3
		8	ABILITY4		
		9	ABILITY3		
		10			

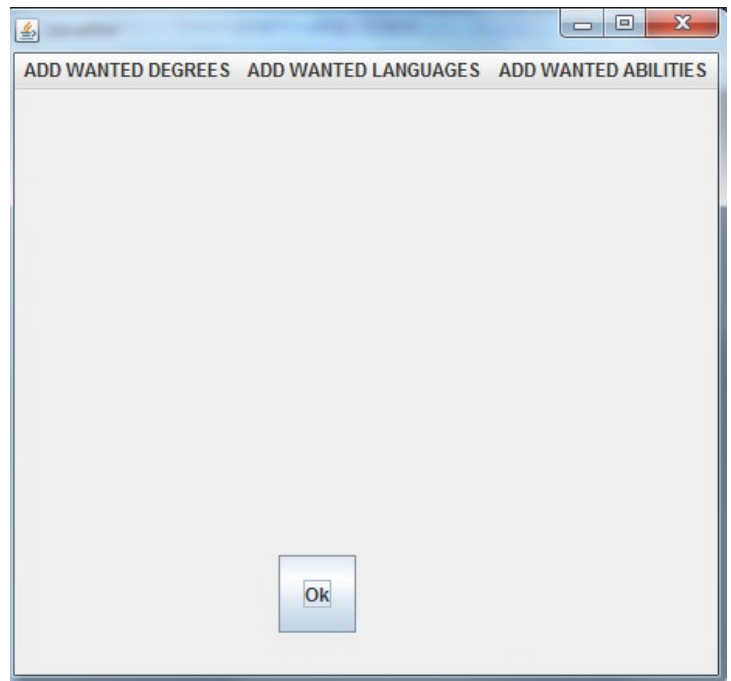
job\_titles,job\_language, job\_skills meta

jid	title	jid	language	jid	skill
1	TITLE1	1	LANGUAGE1	1	ABILITY1
2	TITLE1	2	LANGUAGE2	1	ABILITY2
3	TITLE1	3	LANGUAGE4	2	ABILITY1
4	TITLE2	3	LANGUAGE1	3	ABILITY5
5	TITLE2	4	LANGUAGE7	4	ABILITY6
6	TITLE1	4	LANGUAGE6	5	ABILITY8
7	TITLE1	6	LANGUAGE4	5	ABILITY10
9	TITLE4	9	LANGUAGE4	6	ABILITY10
10	TITLE3	10	LANGUAGE3	7	ABILITY10
12	TITLE1	12	LANGUAGE3	8	ABILITY10
12	TITLE10	12	LANGUAGE7	9	ABILITY4
				10	ABILITY3
				12	ABILITY5

diadikasia ths offer job



A screenshot of a software window titled "diadikasia ths offer job". The window contains a form with several fields, each with a label and a value: "CITY" (katw xwrio), "HOURS" (12:00-12:00), "SALARY" (8000), "DEADLINE" (2017/10/20), "WANTED JOB" (pilotos), and "COMPLETE YOUR ID" (11). An "Ok" button is located at the bottom right of the form area.



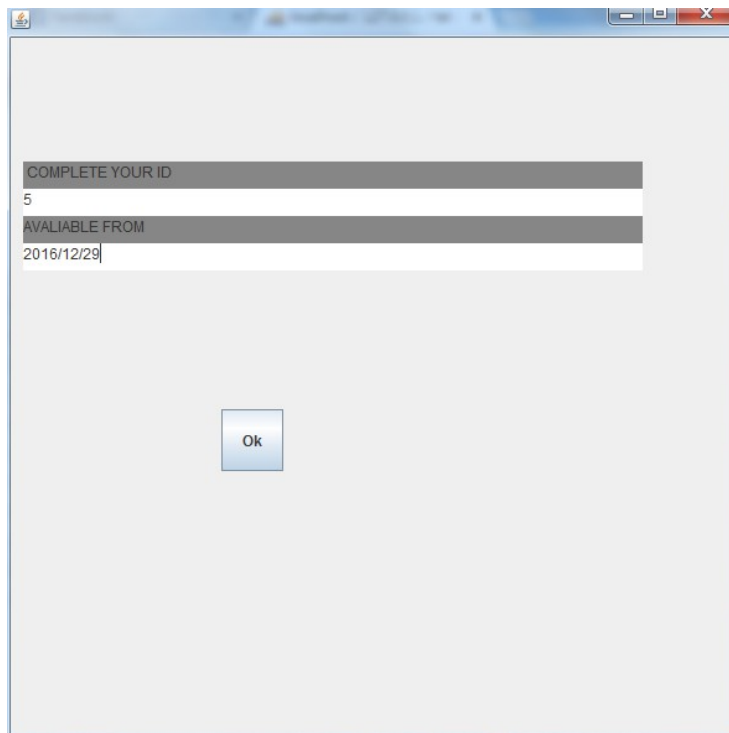
A screenshot of a software window titled "ADD WANTED DEGREES ADD WANTED LANGUAGES ADD WANTED ABILITIES". The window is mostly empty, with an "Ok" button at the bottom center.

## ADD REQUEST

table individuals prin

5	manos	6981234747	csd7894@csd.uoc.gr	77	address66	psaras	9876547	credit_info13	2015/01/10
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diadikasia



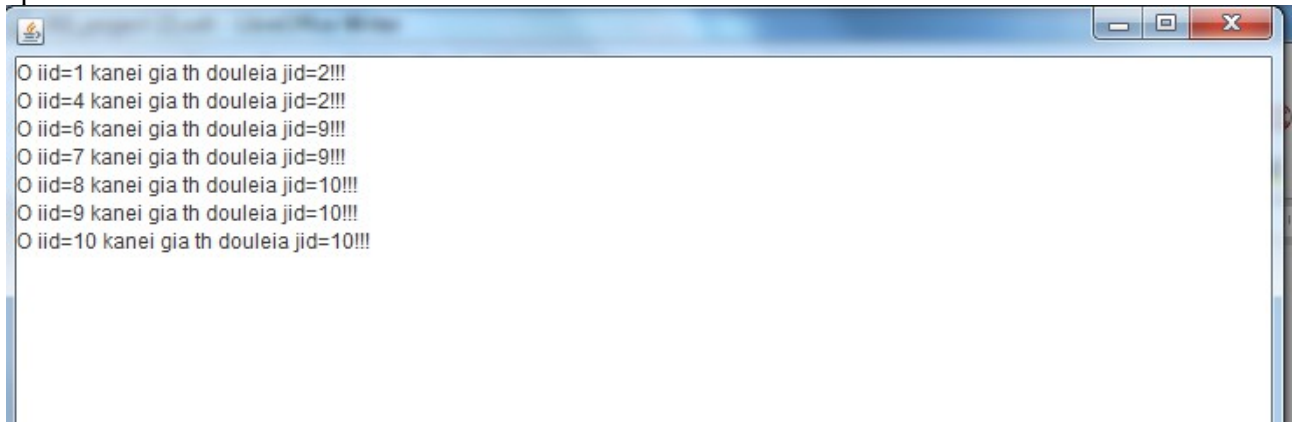
A screenshot of a software window titled "diadikasia". The window contains a form with two fields: "COMPLETE YOUR ID" (5) and "AVAILABLE FROM" (2016/12/29). An "Ok" button is located at the bottom center of the form area.

table individuals meta

5	manos	6981234747	csd7894@csd.uoc.gr	77	address66	psaras	9876547	credit_info13	2016/12/29
---	-------	------------	--------------------	----	-----------	--------	---------	---------------	------------

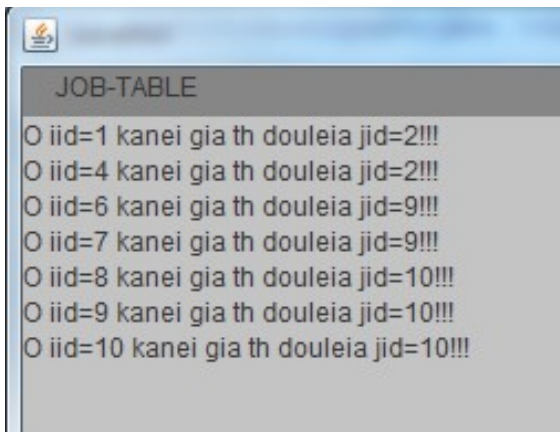
# supply and demand

apotelesmata ths diadikasias

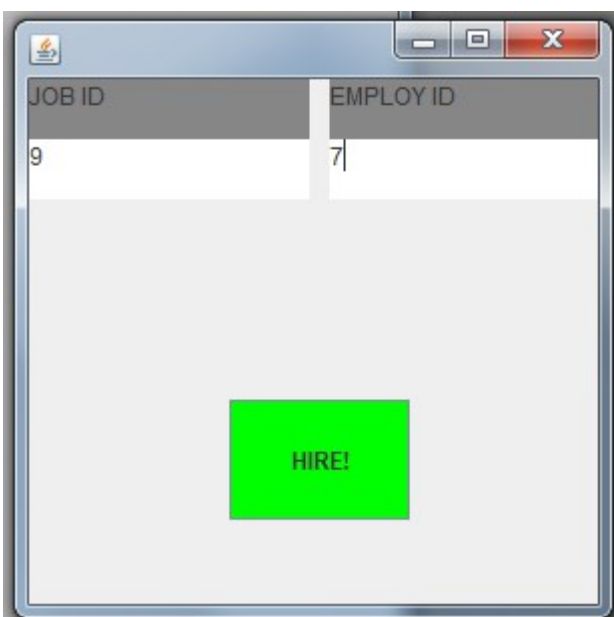


## contact with companies

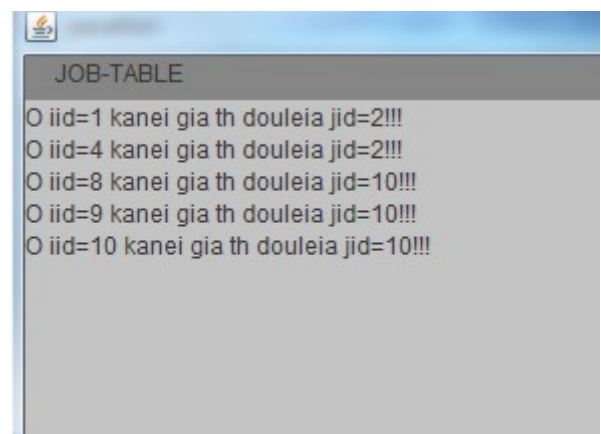
apotelesmata prin



diadikasia hire:

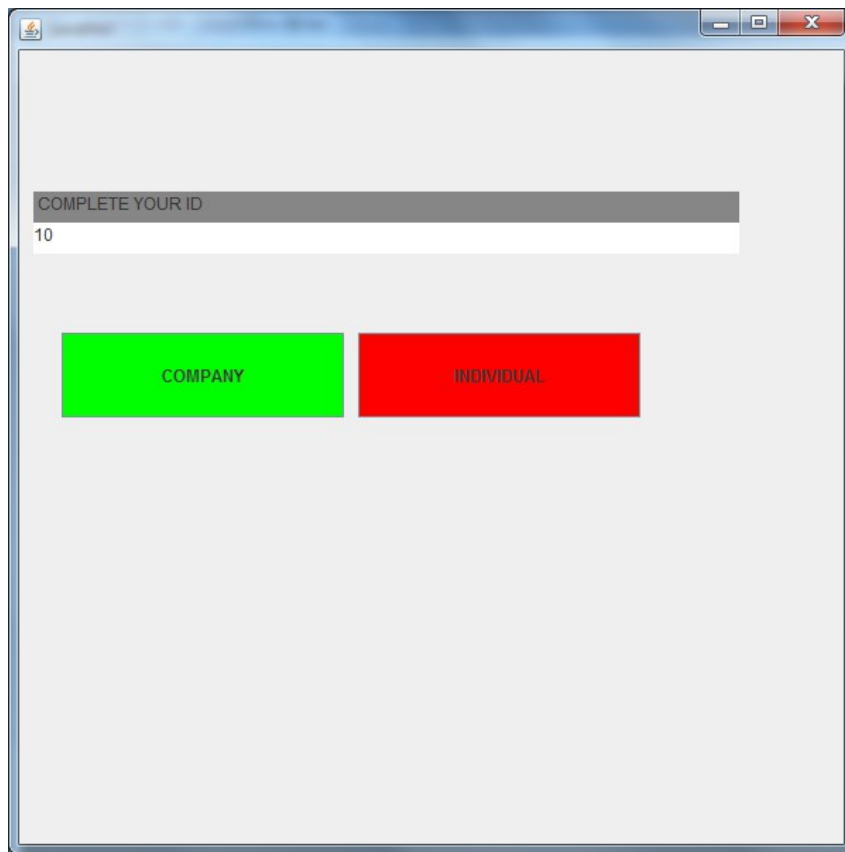


apotelesmata meta :



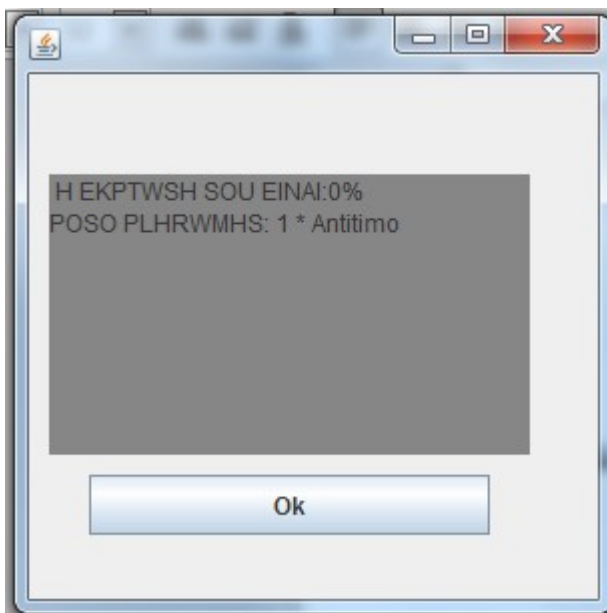
# PAY

diadikasia pay:



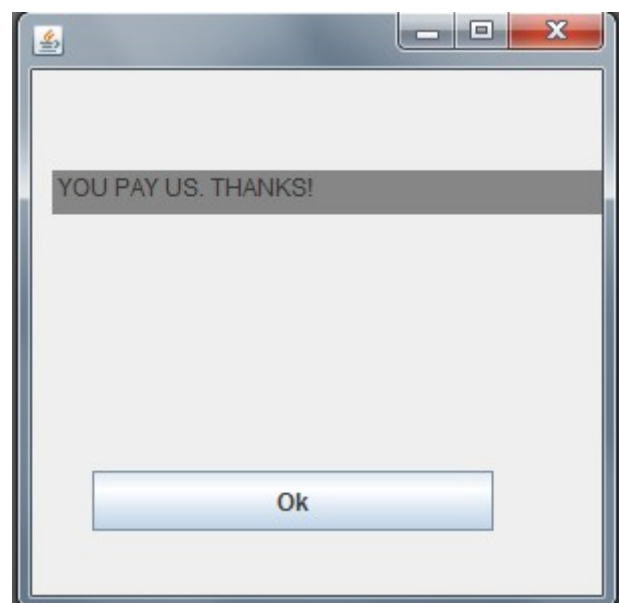
A screenshot of a software window titled "COMPLETE YOUR ID". It features a text input field containing the number "10". Below the input field are two buttons: a green button labeled "COMPANY" and a red button labeled "INDIVIDUAL".

apotelesmata gia company:



A screenshot of a software window displaying payment results for a company. The text inside reads: "H EKPTWSH SOU EINAI:0%" and "POSO PLHRWMHS: 1 \* Antitimo". At the bottom of the window is an "Ok" button.

apotelesmata gia individuals:



A screenshot of a software window displaying payment results for an individual. The text inside reads: "YOU PAY US. THANKS!". At the bottom of the window is an "Ok" button.

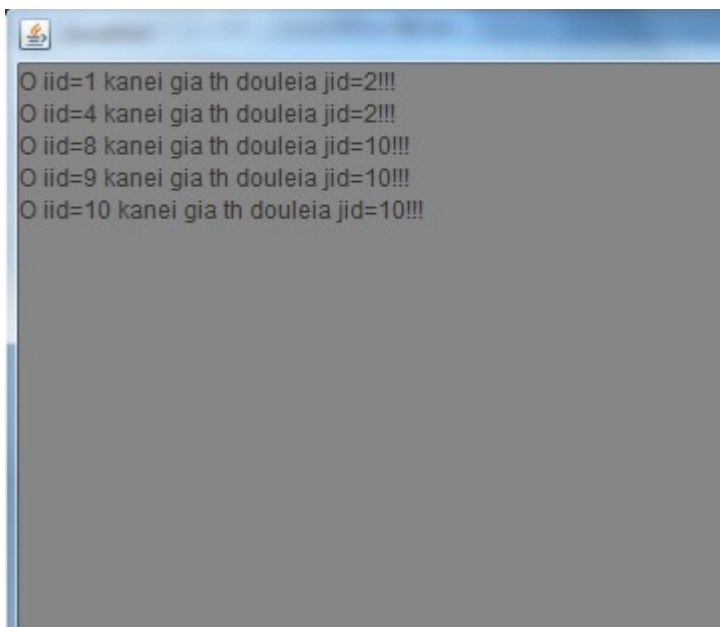
# FIND JOB

diadikasia find job:



The screenshot shows a window titled "FIND JOB" with a standard Windows-style title bar. Inside the window, there is a form titled "COMPLETE YOUR ID". Below the title, there is a text input field containing the number "1". At the bottom of the window, there are two buttons: a green button labeled "COMPANY" and a red button labeled "INDIVIDUAL".

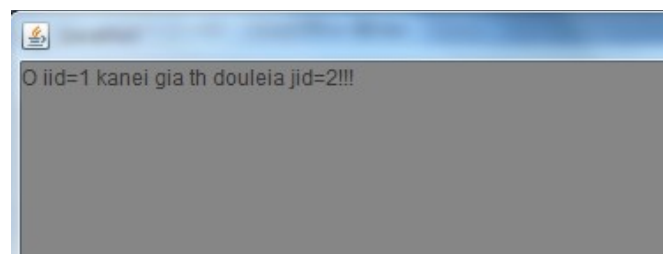
apotelesmata gia company:



The screenshot shows the application window with a list of results for the 'COMPANY' selection. The text displayed is as follows:

- O iid=1 kanei gia th douleia jid=2!!!
- O iid=4 kanei gia th douleia jid=2!!!
- O iid=8 kanei gia th douleia jid=10!!!
- O iid=9 kanei gia th douleia jid=10!!!
- O iid=10 kanei gia th douleia jid=10!!!

apotelesmata gia individual:



The screenshot shows the application window with a list of results for the 'INDIVIDUAL' selection. The text displayed is as follows:

- O iid=1 kanei gia th douleia jid=2!!!

# SYSTEM INFORMATION

