

MAPPING TRA DB E ONTOLOGIA

A DL-Lite_A ontology with mappings is characterized by a triple

$O_m = \langle T, M, DB \rangle$ such that:

- T is a DL-Lite_A **TBox**
 - DB is a relational database
 - M is a set of mapping assertion, partitioned into two sets, M_t and M_a
- Where:

- M_t is a set of so-called ***typing mapping assertions***, each one of the form

$$\phi \rightsquigarrow T_i$$

where ϕ is a query of arity 1 over DB denoting the projection of one relation over one of its columns, and T_i is one of the DL-Lite_A data types;

- M_a is a set of ***data-to-object mapping assertions*** (or simply mapping assertions), each one of the form

$$\phi \rightsquigarrow \psi$$

where ϕ is an arbitrary SQL query of arity $n > 0$ over DB , ψ is a conjunctive query over T of arity $n' > 0$ without non distinguished variables, that possibly involves variable terms. A variable term is a term of the same form as the object terms introduced above, with the difference that variables appear as argument of the function. In other words, a variable terms has the form $f(z)$, where f is a function symbol in Λ of arity m , and z denotes an m -tuple of variables.

TYPING MAPPING ASSERTIONS

M_{t1} : SELECT id FROM ACTOR \rightsquigarrow xsd:int

M_{t2} : SELECT name FROM ACTOR \rightsquigarrow xsd:string

M_{t3}: SELECT surname FROM ACTOR \rightsquigarrow xsd:string

M_{t4}: SELECT sex FROM ACTOR \rightsquigarrow xsd:string

M_{t5}: SELECT actor FROM actor2movie \rightsquigarrow xsd:int

M_{t6} : SELECT movie FROM actor2movie \rightsquigarrow xsd:int

M_{t7} : SELECT role FROM actor2movie \rightsquigarrow xsd:string

M_{t8} : SELECT actor FROM actorsaka \rightsquigarrow xsd:int

M_{t9}: SELECT akasurname FROM actorsaka \rightsquigarrow xsd:string

M_{t10}: SELECT akasurname FROM actorsaka \rightsquigarrow xsd:string

M_{t11}: SELECT akaname FROM AKANAME \rightsquigarrow xsd:string

M_{t12} : SELECT akasurname FROM AKANAME \rightsquigarrow xsd:string

M_{t13}: SELECT title FROM AKATITLE \rightsquigarrow xsd:string

M_{t14}: SELECT id FROM ALTVERSION \rightsquigarrow xsd:int

M_{t15}: SELECT version FROM ALTVERSION \rightsquigarrow xsd:string

M_{t16}: SELECT altversion FROM altversion2movie \rightsquigarrow xsd:int

M_{t17}: SELECT movie FROM altversion2movie \rightsquigarrow xsd:int

M_{t18}: SELECT country FROM CERTIFICATE \rightsquigarrow xsd:string

M_{t19}: SELECT movie FROM CERTIFICATE \rightsquigarrow xsd:int

M_{t20}: SELECT type FROM CERTIFICATE \rightsquigarrow xsd:string

M_{t21}: SELECT name FROM CINEMATOGRAPHER \rightsquigarrow xsd:string

M_{t22}: SELECT surname FROM CINEMATOGRAPHER \rightsquigarrow xsd:string

M_{t23}: SELECT movie FROM cinematographyby \leadsto xsd:int

M_{t24}: SELECT cinematographerN FROM cinematographyby \leadsto xsd:string

M_{t25}: SELECT cinematographerS FROM cinematographyby \leadsto xsd:string

M_{t26}: SELECT name FROM COMPOSER \leadsto xsd:string

M_{t27}: SELECT surname FROM COMPOSER \leadsto xsd:string

M_{t28}: SELECT name FROM COUNTRY \leadsto xsd:string

M_{t29}: SELECT sfxcompany FROM country2sfx \leadsto xsd:string

M_{t30}: SELECT country FROM country2sfx \leadsto xsd:string

M_{t31}: SELECT id FROM CRAZYCREDIT \leadsto xsd:int

M_{t32}: SELECT credit FROM CRAZYCREDIT \leadsto xsd:string

M_{t33}: SELECT credit FROM crazycredit2movie \leadsto xsd:int

M_{t34}: SELECT movie FROM crazycredit2movie \leadsto xsd:int

M_{t35}: SELECT name FROM DESIGNER \leadsto xsd:string

M_{t36}: SELECT surname FROM DESIGNER \leadsto xsd:string

M_{t37}: SELECT movie FROM designer2movie \leadsto xsd:int

M_{t38}: SELECT designerN FROM designer2movie \leadsto xsd:string

M_{t39}: SELECT designerS FROM designer2movie \leadsto xsd:string

M_{t40}: SELECT name FROM DIRECTOR \leadsto xsd:string

M_{t41}: SELECT surname FROM DIRECTOR \leadsto xsd:string

M_{t42}: SELECT movie FROM directedby \leadsto xsd:int

M_{t43}: SELECT directorN FROM directedby \leadsto xsd:string

M_{t44}: SELECT directorS FROM directedby \leadsto xsd:string

M_{t45}: SELECT distributor FROM distributed \leadsto xsd:string

M_{t46}: SELECT movie FROM distributed \leadsto xsd:int

M_{t47}: SELECT name FROM DISTRIBUTOR \leadsto xsd:string

M_{t48}: SELECT distributor FROM distributor2country \leadsto xsd:string

M_{t49}: SELECT country FROM distributor2country \leadsto xsd:string

M_{t50}: SELECT name FROM EDITOR ~ xsd:string
M_{t51}: SELECT surname FROM EDITOR ~ xsd:string
M_{t52}: SELECT movie FROM editby ~ xsd:int
M_{t53}: SELECT editorN FROM editby ~ xsd:string
M_{t54}: SELECT editorS FROM editby ~ xsd:string
M_{t55}: SELECT id FROM GOOF ~ xsd:int
M_{t56}: SELECT goof FROM GOOF ~ xsd:string
M_{t57}: SELECT goof FROM goof2movie ~ xsd:int
M_{t58}: SELECT movie FROM goof2movie ~ xsd:int
M_{t59}: SELECT title FROM ITAKATITLE ~ xsd:string
M_{t60}: SELECT word FROM KEYWORD ~ xsd:string
M_{t61}: SELECT keyword FROM key2movie ~ xsd:string
M_{t62}: SELECT movie FROM key2movie ~ xsd:int
M_{t63}: SELECT name FROM LANGUAGE ~ xsd:string
M_{t64}: SELECT language FROM lang2movie ~ xsd:string
M_{t65}: SELECT movie FROM lang2movie ~ xsd:int
M_{t66}: SELECT id FROM LINK ~ xsd:int
M_{t67}: SELECT featured_in FROM LINK ~ xsd:string
M_{t68}: SELECT referenced_in FROM LINK ~ xsd:string
M_{t69}: SELECT spin FROM LINK ~ xsd:string
M_{t70}: SELECT spoofed FROM LINK ~ xsd:string
M_{t71}: SELECT version FROM LINK ~ xsd:string
M_{t72}: SELECT followed FROM LINK ~ xsd:string
M_{t73}: SELECT features FROM LINK ~ xsd:string
M_{t74}: SELECT remake FROM LINK ~ xsd:string
M_{t75}: SELECT follows FROM LINK ~ xsd:string
M_{t76}: SELECT ref FROM LINK ~ xsd:string

M_{t77}: SELECT locationcity FROM located \leadsto xsd:string
M_{t78}: SELECT locationcountry FROM located \leadsto xsd:string
M_{t79}: SELECT movie FROM located \leadsto xsd:int
M_{t80}: SELECT city FROM LOCATION \leadsto xsd:string
M_{t81}: SELECT country FROM LOCATION \leadsto xsd:string
M_{t82}: SELECT link FROM movielinks \leadsto xsd:int
M_{t83}: SELECT movie FROM movielinks \leadsto xsd:int
M_{t84}: SELECT id FROM MOVIES \leadsto xsd:int
M_{t85}: SELECT title FROM MOVIES \leadsto xsd:string
M_{t86}: SELECT year FROM MOVIES \leadsto xsd:string
M_{t87}: SELECT runtimes FROM MOVIES \leadsto xsd:string
M_{t88}: SELECT sound FROM MOVIES \leadsto xsd:string
M_{t89}: SELECT genre FROM MOVIES \leadsto xsd:string
M_{t90}: SELECT colortype FROM MOVIES \leadsto xsd:string
M_{t91}: SELECT crewcoverage FROM MOVIES \leadsto xsd:string
M_{t92}: SELECT castcoverage FROM MOVIES \leadsto xsd:string
M_{t93}: SELECT votes FROM MOVIES \leadsto xsd:int
M_{t94}: SELECT rank FROM MOVIES \leadsto xsd:float
M_{t95}: SELECT mpaa FROM MOVIES \leadsto xsd:string
M_{t96}: SELECT akatitle FROM moviesaka \leadsto xsd:string
M_{t97}: SELECT movie FROM moviesaka \leadsto xsd:int
M_{t98}: SELECT itakatitle FROM moviesitaka \leadsto xsd:string
M_{t99}: SELECT movie FROM moviesitaka \leadsto xsd:int
M_{t100}: SELECT movie FROM musicby \leadsto xsd:int
M_{t101}: SELECT composerN FROM musicby \leadsto xsd:string
M_{t102}: SELECT composerS FROM musicby \leadsto xsd:string
M_{t103}: SELECT id FROM PLOT \leadsto xsd:int

M_{t104}: SELECT plot FROM PLOT \leadsto xsd:string
M_{t105}: SELECT author FROM PLOT \leadsto xsd:string
M_{t106}: SELECT plot FROM plot2movie \leadsto xsd:int
M_{t107}: SELECT movie FROM plot2movie \leadsto xsd:int
M_{t108}: SELECT movie FROM prodby \leadsto xsd:int
M_{t109}: SELECT producerN FROM prodby \leadsto xsd:string
M_{t110}: SELECT producerS FROM prodby \leadsto xsd:string
M_{t111}: SELECT name FROM PRODCOMPANY \leadsto xsd:string
M_{t112}: SELECT prodcompany FROM prodcompany2country \leadsto xsd:string
M_{t113}: SELECT country FROM prodcompany2country \leadsto xsd:string
M_{t114}: SELECT prodcompany FROM prodcompany2movie \leadsto xsd:string
M_{t115}: SELECT movie FROM prodcompany2movie \leadsto xsd:string
M_{t116}: SELECT name FROM PRODDESIGNER \leadsto xsd:string
M_{t117}: SELECT surname FROM PRODDESIGNER \leadsto xsd:string
M_{t118}: SELECT movie FROM proddesignby \leadsto xsd:int
M_{t119}: SELECT proddesignerN FROM proddesignby \leadsto xsd:string
M_{t120}: SELECT proddesignerS FROM proddesignby \leadsto xsd:string
M_{t121}: SELECT name FROM PRODUCER \leadsto xsd:string
M_{t122}: SELECT surname FROM PRODUCER \leadsto xsd:string
M_{t123}: SELECT movie FROM releasein \leadsto xsd:int
M_{t124}: SELECT country FROM releasein \leadsto xsd:string
M_{t125}: SELECT date FROM releasein \leadsto xsd:string
M_{t126}: SELECT movie FROM sfxby \leadsto xsd:int
M_{t127}: SELECT sfxcompany FROM sfxby \leadsto xsd:string
M_{t128}: SELECT name FROM SFXCOMPANY \leadsto xsd:string
M_{t129}: SELECT movie FROM shotin \leadsto xsd:int
M_{t130}: SELECT country FROM shotin \leadsto xsd:string

M_{t131}: SELECT year FROM shotin \leadsto xsd:string
M_{t132}: SELECT name FROM SOUNDTRACK \leadsto xsd:string
M_{t133}: SELECT writer FROM SOUNDTRACK \leadsto xsd:string
M_{t134}: SELECT composer FROM SOUNDTRACK \leadsto xsd:string
M_{t135}: SELECT musician FROM SOUNDTRACK \leadsto xsd:string
M_{t136}: SELECT id FROM TAG \leadsto xsd:int
M_{t137}: SELECT tag FROM TAG \leadsto xsd:string
M_{t138}: SELECT tag FROM tag2movie \leadsto xsd:int
M_{t139}: SELECT movie FROM tag2movie \leadsto xsd:int
M_{t140}: SELECT soundtrack FROM SOUNDTRACK \leadsto xsd:string
M_{t141}: SELECT movie FROM SOUNDTRACK \leadsto xsd:int
M_{t142}: SELECT id FROM TRIVIA \leadsto xsd:int
M_{t143}: SELECT trivia FROM TRIVIA \leadsto xsd:string
M_{t144}: SELECT trivia FROM trivia2movies \leadsto xsd:int
M_{t145}: SELECT movie FROM trivia2movies \leadsto xsd:int
M_{t146}: SELECT name FROM WRITER \leadsto xsd:int
M_{t147}: SELECT surname FROM WRITER \leadsto xsd:string
M_{t148}: SELECT movie FROM writerby \leadsto xsd:int
M_{t149}: SELECT writerN FROM writerby \leadsto xsd:string
M_{t150}: SELECT writerS FROM writerby \leadsto xsd:string

DATA-TO-OBJECT MAPPING ASSERTIONS

$\Lambda(\text{OBJECT VARIABLE TERMS}) = \{ \text{actor}(x), \text{akaname}(x,y), \text{akatitle}(x), \text{altversion}(x), \text{certificate}(x), \text{cinematographer}(x,y), \text{composer}(x,y), \text{country}(x), \text{crazycredit}(x), \text{designer}(x,y), \text{director}(x,y), \text{distributor}(x), \text{editor}(x,y), \text{goof}(x), \text{itakatitle}(x), \text{keyword}(x), \text{language}(x), \text{link}(x), \text{location}(x), \text{movie}(x), \text{plot}(x), \text{prodcompany}(x), \text{proddesigner}(x,y), \text{producer}(x,y), \text{sfxcompany}(x), \text{soundtrack}(x), \text{tag}(x), \text{trivia}(x), \text{writer}(x,y) \}$

M_{m1} : SELECT *ID, name, surname, sex*
FROM ACTOR



ACTOR(**actor**(*ID*)), ID(**actor**(*ID*), *ID*), name(**actor**(*ID*), *name*),
surname(**actor**(*ID*), *surname*), sex(**actor**(*ID*), *sex*)

M_{m2} : SELECT *actor, movie, role*
FROM actor2movie



actor2movie(**actor** (*actor*), **movie** (*movie*)), role(**actor** (*actor*), **movie** (*movie*), *role*)

M_{m3} : SELECT *actor, akaname, akasurname*
FROM actorsaka



actorsaka(**actor** (*actor*), **akaname** (*akaname*, *akasurname*))

M_{m4}: SELECT *akaname,akasurname*
FROM AKANAME



AKANAME(**akaname** (*akaname,akasurname*)), akaname(**akaname**
(*akaname,akasurname*), *akaname*), akasurname(**akaname** (*akaname,akasurname*), *akasurname*)

M_{m5}: SELECT *title*
FROM AKATITLE



AKATITLE(**akatitle** (*title*)), title(**akatitle** (*title*), *title*)

M_{m6}: SELECT *id,version*
FROM ALTVERSION



ALTVERSION(**altversion** (*id*)), id(**altversion** (*id*), *id*), version(**altversion** (*id*), *version*)

M_{m7}: SELECT *version,movie*
FROM altversion2movie



altversion2movie(**altversion** (*version*),**movie** (*movie*))

M_{m8}: SELECT *country,movie,type*
FROM CERTIFICATE



CERTIFICATE(**country** (*country*),**movie** (*movie*)), type(**certificate** (*type*), *type*)

M_{m9}: SELECT *name,surname*
FROM CINEMATOGRAPHER



CINEMATOGRAPHER(**cinematographer** (*name, surname*)), name(**cinematographer**
(*name, surname*), *name*), surname(**cinematographer** (*name, surname*), *surname*)

M_{m10}: SELECT *movie, cinematographerN, cinematographerS*
FROM cinematographyby



cinematographyby(**movie** (*movie*), **cinematographer** (*cinematographerN*,
cinematographerS))

M_{m11}: SELECT *name, surname*
FROM COMPOSER



COMPOSER(**composer** (*name, surname*)), name(**composer** (*name, surname*), *name*),
surname(**composer** (*name, surname*), *surname*)

M_{m12}: SELECT *name*
FROM COUNTRY



COUNTRY(**country** (*name*)), name(**country** (*name*), *name*)

M_{m13}: SELECT *sfxcompany, country*
FROM country2sfx



country2sfx(**sfxcompany** (*sfxcompany*), **country** (*country*))

M_{m14}: SELECT *id, credit*
FROM CRAZYCREDIT



CRAZYCREDIT(**crazycredit** (*id*)), id(**crazycredit** (*id*), *id*), credit(**crazycredit** (*id*), *credit*)

M_{m15}: SELECT *credit, movie*
FROM crazycredit2movie



crazycredit2movie(**crazycredit** (*credit*), **movie** (*movie*))

M_{m16}: SELECT *name,surname*
FROM DESIGNER



DESIGNER(**designer** (*name, surname*)), name(**designer** (*name, surname*), *name*),
surname(**designer** (*name, surname*), *surname*)

M_{m17}: SELECT *designerN,designerS,movie*
FROM designer2movie



designer2movie(**designer** (*designerN,designerS*), **movie** (*movie*))

M_{m18}: SELECT *movie,directorN,directorS*
FROM directedby



directedby(**movie** (*movie*), **director** (*directorN,directorS*))

M_{m19}: SELECT *name,surname*
FROM DIRECTOR



DIRECTOR(**director** (*name, surname*)), name(**director** (*name, surname*), *name*),
surname(**director** (*name, surname*), *surname*)

M_{m20}: SELECT *name*
FROM DISTRIBUTOR



DISTRIBUTOR(**distributor** (*name*)), name(**distributor** (*name*), *name*)

M_{m21}: SELECT *distributor, movie*
FROM distributed



distributed(**distributor** (*distributor*), **movie** (*movie*))

M_{m22}: SELECT *distributor, country*
FROM distributor2country



distributor2country (**distributor** (*distributor*), **country** (*country*))

M_{m23}: SELECT *movie, editorN, editorS*
FROM editby



editby(**movie** (*movie*), **editor** (*editorN, editorS*))

M_{m24}: SELECT *name, surname*
FROM EDITOR



EDITOR(**editor** (*name, surname*)), name(**editor** (*name, surname*), *name*), surname(**editor** (*name, surname*), *surname*)

M_{m25}: SELECT *id, goof*
FROM GOOF



GOOF (**goof** (*id*)), id(**goof** (*id*), *id*, goof(**goof** (*id*), *goof*))

M_{m26}: SELECT *goof*,*movie*
FROM goof2movie



goof2movie(**goof**(*goof*),**movie** (*movie*))

M_{m27}: SELECT *title*
FROM ITAKATITLE



ITAKATITLE(**itakatitle** (*title*)), title(**itakatitle** (*title*), *title*)

M_{m28}: SELECT *word*
FROM KEYWORD



KEYWORD(**keyword** (*word*)), word(**keyword** (*word*), *word*)

M_{m29}: SELECT *keyword*,*movie*
FROM key2movie



key2movie(**movie** (*movie*),**keyword**(*keyword*))

M_{m30}: SELECT *name*
FROM LANGUAGE



LANGUAGE(**language**(*name*)), name(**language**(*name*), *name*)

M_{m31}: SELECT *movie*,*language*
FROM lang2movie



lang2movie(**movie** (*movie*),**language**(*language*))

M_{m32}: SELECT

id,featured_in,referenced_in,spin,spoofed,version, followed,features,remake, follows,ref
FROM link



LINK(**link** (*id*)), id(**link** (*id*), *id*), featured_in(**link** (*id*), *featured_in*), referenced_in(**link** (*id*),
referenced_in), spin(**link** (*id*), *spin*), spoofed(**link** (*id*), *spoofed*), version(**link** (*id*), *version*),
followed(**link** (*id*), *followed*), features(**link** (*id*), *features*), remake(**link** (*id*), *remake*), follows(**link**
(*id*), *follows*), ref(**link** (*id*), *ref*)

M_{m33}: SELECT *locationcity,locationcountry,movie*

FROM located



located(**country**(*locationcity*),**location**(*locationcountry*), **movie**(*movie*))

M_{m34}: SELECT *link,movie*

FROM movielinks



movielinks(**link** (*link*),**movie**(*movie*))

M_{m35}: SELECT

id,title,year,runtimes,sound,genre,colortype,crewcoverage,castcoverage,votes,rank,mpaa
FROM MOVIES



MOVIES(**movie**(*id*)), id(**movie**(*id*), *id*), title(**movie** (*id*),*title*), year(**movie** (*id*), *year*),
runtimes(**movie** (*id*), *runtimes*), sound(**movie** (*id*), *sound*), genre(**movie** (*id*), *genre*),
colortype(**movie** (*id*),*colortype*), crewcoverage(**movie** (*id*), *crewcoverage*), castcoverage(**movie**
(*id*), *castcoverage*), votes(**movie** (*id*),*votes*), rank(**movie** (*id*), *rank*), mpaa(**movie** (*id*), *mpaa*)

M_{m36}: SELECT *akatitle*,*movie*
FROM moviesaka



moviesaka(**akatitle** (*akatitle*),**movie**(*movie*))

M_{m37}: SELECT *itakatitle*,*movie*
FROM moviesitaka



moviesitaka(**itakatitle**(*itakatitle*),**movie**(*movie*))

M_{m38}: SELECT *composerN*,*composerS*,*movie*
FROM musicby



musicby(**composer** (*composerN*,*composerS*),**movie** (*movie*))

M_{m39}: SELECT *id*,*plot*,*author*
FROM PLOT



PLOT **plot** (*id*)), id(**plot** (*id*),*id*), plot(**plot** (*id*), *plot*), author(**plot** (*id*), *author*)

M_{m40}: SELECT *plot*,*movie*
FROM plot2movie



plot2movie(**plot**(*plot*), **movie** (*movie*))

M_{m41}: SELECT *producerN*,*producerS*,*movie*
FROM prodby



prodby(**producer** (*producerN*,*producerS*),**movie** (*movie*))

M_{m42}: SELECT *name*
FROM PRODCOMPANY



PRODCOMPANY (**prodcompany**(*name*)), name(**prodcompany**(*name*), *name*)

M_{m43}: SELECT *prodcompany, country*
FROM prodcompany2country



prodcompany2country (**prodcompany** (*prodcompany*), **country** (*country*))

M_{m44}: SELECT *prodcompany, movie*
FROM prodcompany2movie



prodcompany2movie (**prodcompany** (*prodcompany*), **movie** (*movie*))

M_{m45}: SELECT *movie, proddesignerN, proddesignerS*
FROM proddesignby



proddesignby(**movie** (*movie*), **proddesigner** (*proddesignerN, proddesignerS*))

M_{m46}: SELECT *name, surname*
FROM PRODDESIGNER



PRODDESIGNER(**proddesigner** (*name, surname*)), name(**proddesigner** (*name, surname*), *name*), surname(**proddesigner** (*name, surname*), *surname*)

M_{m47}: SELECT *name, surname*
FROM PRODUCER



PRODUCER(**producer** (*name, surname*)), name(**producer** (*name, surname*), *name*), surname(**producer** (*name, surname*), *surname*)

M_{m48}: SELECT *movie, country, date*
FROM releasein



releasein(**movie** (*movie*), **country** (*country*)), date(**movie** (*movie*), **country** (*country*), *date*)

M_{m49}: SELECT *sfxcompany, movie*
FROM sfxby



sfxby(**sfxcompany**(*sfxcompany*), **movie** (*movie*))

M_{m50}: SELECT *country, movie, year*
FROM shotin



shotin(**country** (*country*), **movie** (*movie*), year(**movie** (*movie*), **country** (*country*), *year*))

M_{m51}: SELECT *name, writer, composer, musician*
FROM SOUNDTRACK



SOUNDTRACK(**soundtrack** (*name*)), name(**soundtrack** (*name*), *name*),
writer(**soundtrack** (*name*), *writer*), composer(**soundtrack** (*name*), *composer*),
musician(**soundtrack** (*name*), *musician*)

M_{m52}: SELECT *id, tag*
FROM TAG



TAG(**tag**(*id*)), id(**tag**(*id*), *id*), tag(**tag** (*id*), *tag*)

M_{m53}: SELECT *tag, movie*
FROM tag2movie



tag2movie(**tag** (*tag*), **movie** (*movie*))

M_{m54}: SELECT *soundtrack, movie*
FROM tracklist



tracklist(**soundtrack** (*soundtrack*), **movie** (*movie*))

M_{m55}: SELECT *id, trivia*
FROM TRIVIA



TRIVIA(**trivia**(*id*)), id(**trivia**(*id*), *id*), trivia(**trivia** (*id*), *trivia*)

M_{m56}: SELECT *trivia, movie*
FROM trivia2movie



trivia2movie(**trivia** (*trivia*), **movie** (*movie*))

M_{m57}: SELECT *name, surname*
FROM WRITER



WRITER(**writer** (*name, surname*)), name(**writer** (*name, surname*), *name*),
surname(**writer**(*name, surname*), *surname*)

M_{m58}: SELECT *writerN, writerS, movie,*
FROM writerby



writerby(**writer**(*writerN, writerS*), **movie** (*movie*))

M_{m59}: SELECT *city, country*
FROM LOCATION



LOCATION(**location** (*city*)), city(**location** (*city*),*city*), **country**(*country*)

M_{m60}: SELECT *name*
FROM SFXCOMPANY



SFXCOMPANY(**sfxcompany** (*name*)), name(**sfxcompany** (*name*),*name*)