1.1

πtitle,score(γtitle,MAX(score)->score(**movie**⋈L**review**))

SELECT m.title,MAX(score) as score FROM movie m LEFT JOIN review r ON m.title=r.title GROUP BY m.title;

1.2

δ(πcritic(σdir=‘Spielberg’(**movie)-**σtitle like ‘E.T.%’**(movie))**⋈**review**))

SELECT DISTINCT r.critic FROM review r , movie m WHERE r.title=m.title AND m.dir='Spielberg' AND m.title NOT LIKE 'E.T.%';

1.3

SELECT m1.dir,COUNT(m2."language") cou FROM movie m1 LEFT JOIN movie m2 ON m1.title=m2.title AND m2."language"='French' GROUP BY m1.dir ORDER BY cou DESC

1.4

SELECT actor FROM (

SELECT c.actor,AVG(m.budget) budget FROM "cast" c JOIN movie m ON c.title=m.title GROUP BY c.actor ) tem WHERE budget>(

SELECT AVG(budget) tombudget FROM movie m,"cast" c WHERE m.title=c.title AND c.actor='Tom Cruise')

2.1

SELECT critic,AVG(score) FROM review GROUP BY critic

2.2 Query.java

3, ρh1(n1,p1,d1,r1)Hotel - ∏n1,p1,d1,r1 (σp2<=p1∧d2<=d1∧r2>=r1∧(p2<p1∨d2<d1∨r2>r1) (ρh1(n1,p1,d1,r1)Hotel X ρh2(n2,p2,d2,r2)Hotel) )

select \*

from Hotel h1

where not exists(

select \*

from Hotel h2

where h2.Price<=h1.Price and h2.Distance<=h1.Distance and h2.Rating>=h1.Rating

and (h2.Price<h1.Price or h2.Distance<h1.Distance or h2.Rating>h1.Rating)

)