1) k = 5

TABLE : department

dept_name	building	budget
Civil Eng.	Chandler	255041.46
Biology	CandleStick	647610.55
History	Taylor	699140.86
Physics	Wrigley	942162.76
Marketing	Lambeau	210627.58

TABLE : section

course_id	sec_id	semester	year	building	room_number	time_slot_id
313	1	Fall	2010	Chandler	804	N
747	1	Spring	2004	Gates	314	K
443	1	Spring	2010	Whitman	434	0
893	1	Fall	2007	Fairchild	145	В
663	1	Spring	2005	Fairchild	145	D

TABLE : takes

id	course_id	sec_id	semester	year	grade
73492	760	1	Spring	2004	Α
760	571	1	Spring	2004	В
69730	313	1	Fall	2010	Α
53469	169	1	Spring	2007	С
52866	795	1	Spring	2004	В

4)

id	CGPA
76672	5.181818
90567	5.9444447
4582	5.3
81258	6.5

5)

a)

name	cgpa
Beeu	8.2
Linden	8.166667
Pang	8.142858
Masri	8.0625
Komori	7.9375

department : Psychology

name	cgpa
Michel	7.5833335
Joshi	7.5333333
Damas	7.4375
Heers	7.2941175
Lui	7.2

department : Elec. Eng.

name	cgpa
Reuver	7.6666665
Larion	7.5384617
Garg	7.4375
Harrison	7.4
Kreutz	6.9411764

department : Civil Eng.

name	cgpa
Nagaraj	7.888889
OMalley	7.733333
Hoshi	7.7
Ponnambalam	7.5833335
Sahani	7.375

c)

course_id: 237

name	сдра
Beeu	8.2
Komori	7.9375
Morales	7.909091
Rioult	7.866667
Yap	7.857143

course_id: 349

name	сдра
Astrom	7.6666665
Joshi	7.5333333
Liao	7.4615383
Raiev	7.375
So	7.3076925

course_id: 735

name	сдра
Pang	8.142858
Yap	7.857143
Betho	7.8
Arena	7.7272725
Urano	7.5