

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
Pol. Sci.	Whitman	573745.09
English	Palmer	611042.66
Accounting	Saucon	441840.92
Comp. Sci.	Lamberton	106378.69
Languages	Linderman	601283.60
Finance	Candlestick	866831.75
Geology	Palmer	406557.93
Cybernetics	Mercer	794541.46
Astronomy	Taylor	617253.94
Athletics	Bronfman	734550.70
Statistics	Taylor	395051.74
Psychology	Thompson	848175.04
Math	Brodhead	777605.11
Elec. Eng.	Main	276527.61
Mech. Eng.	Rauch	520350.65
medical	Pasteur	700000.00
dental	Pasteur	800000.00

Figure 1_ سوال ۵_الف

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
Pol. Sci.	Whitman	573745.09
English	Palmer	611042.66
Accounting	Saucon	441840.92
Comp. Sci.	Lamberton	106378.69
Languages	Linderman	601283.60
Finance	Candlestick	866831.75
Geology	Palmer	406557.93
Cybernetics	Mercer	794541.46
Astronomy	Taylor	617253.94
Athletics	Bronfman	734550.70
Statistics	Taylor	395051.74
Psychology	Thompson	848175.04
Math	Brodhead	777605.11
Elec. Eng.	Main	276527.61
Mech. Eng.	Rauch	520350.65
dental	Pasteur	870000.00
medical	Pasteur	630000.00

Figure ۲_ سوال ۵_ ب

name	person_type	calc_number
Morton	STU	984.9878703703703704
So	STU	7984.2467391304347826
Chowdhury	STU	9814.1954166666666667
Kok	STU	4419.1079347826086957
Saariluoma	STU	4647.6675294117647059
Silverman	STU	5975.5629059829059829
Kocsis	STU	2477.9715294117647059
► Clemme	STU	5975.5629059829059829
Jordan	STU	5052.8033613445378151
Abdellatif	STU	4419.1079347826086957
Wyes	STU	4955.7204761904761905
Piedrah	STU	5263.7164220183486239
Kiltz	STU	9238.8541860465116279
Schmitz	STU	2821.7103061224489796
OBrien	STU	4419.1079347826086957
Pigd	STU	4955.7204761904761905

Figure ۳_ سوال ۳_ ب

QUERY: SELECT v_job_id
CONTEXT: PL/pgSQL function filmtable10() line 12 at RAISE
> Query Time: 0.002s

Figure ۴_ سوال ۴_ الف

Message	Summary	Result 1				
film_title	film_rating	rank_in_all	rank_in_rating	sum_amount	is_in_first_quartile	
Academy Dinosaur	PG	718	147	33.79	false	
Ace Goldfinger	G	508	89	52.93	false	
Adaptation Holes	NC-17	699	137	34.89	false	
Affair Prejudice	G	261	47	83.79	false	
African Egg	G	557	99	47.89	false	
Agent Truman	PG	118	24	111.81	true	
Airplane Sierra	PG-13	263	64	82.85	false	
Airport Pollock	R	239	46	86.85	false	
Alabama Devil	PG-13	354	80	71.88	false	
Aladdin Calendar	NC-17	66	18	131.77	true	
Alamo Videotape	G	761	132	30.78	false	
Alaska Phantom	PG	675	135	37.77	false	
Ali Forever	PG	493	101	54.91	false	
Alien Center	NC-17	251	51	84.80	false	
Alley Evolution	NC-17	568	108	46.87	false	
Alone Trip	R	433	85	61.83	false	
Alter Victory	PG-13	759	172	30.80	false	
Amadeus Holy	PG	731	149	32.80	false	
Amelie Hellfighters	R	381	73	67.90	false	
American Circus	R	31	5	146.81	true	
Amistad Midsummer	G	367	67	70.79	false	
Anaconda Confessions	R	525	106	51.82	false	
Analyze Hoosiers	R	487	96	55.86	false	

Figure ۵_ سوال ۹

2	Ace Goldfinger	A Astounding Epistle of a D	2006	1	3	4.99	48	12.34	G	2022-12-25 19:34:02.49
3	Adaptation Holes	A Astounding Reflection of i	2006	1	7	2.99	50	21.99	NC-17	2022-12-25 19:30:11.63
4	Affair Prejudice	A Fanciful Documentary of e	2006	1	5	2.99	117	27.64	G	2022-12-25 19:34:02.49

Figure ۶_ سوال ۷_ خروجی

```

68
69 CALL saraup4('Ace Goldfinger','Affair Prejudice');
70 SELECT * FROM film ORDER BY title;
71

```

Figure ۷_ سوال ۷_ ورودی

film_title	num_of_rents
Human Graffiti	15
Westward Seabiscuit	26
Gleaming Jawbreaker	29
Bulworth Commandments	7
Splash Gump	14
Vertigo Northwest	8
Cheaper Clyde	20
Language Cowboy	11
Lady Stage	17
Wizard Coldblooded	16
Rules Human	16
Color Philadelphia	24
Oklahoma Jumanji	6
Elephant Trojan	14
Anaconda Confessions	21
Mulholland Beast	7
Academy Dinosaur	23
King Evolution	9
Angels Life	22

Figure ۸_ سوال ۶_ خروجی

```
SELECT *
FROM actor_of2(1)
```

Figure ۹_ سوال ۶_ ورودی

s_id	s_name	dept_type	job_type
48861	Ende	scientist	STU
19541	Drews	scientist	STU
68554	Larsson	Engineer	STU
87193	Pinkus	Engineer	STU
16593	Skuras	scientist	STU
97953	Kaneko	scientist	STU
56057	Hull	scientist	STU
32119	Nagashima	Engineer	STU
87965	Reiss	scientist	STU
38545	Fok	Engineer	STU
42388	Nikut	scientist	STU
18859	Rubio	Engineer	STU
49813	Al-Hu	scientist	STU
52385	Higuchi	scientist	STU
17600	Peter	scientist	STU
49073	Bonvin	Engineer	STU
48471	Elias	scientist	STU
65258	Tian	scientist	STU
56078	Soltys	scientist	STU
71904	Boldin	Engineer	STU
97101	Marek	scientist	STU
50885	Konstantinides	scientist	INS
33401	Campbell	Engineer	STU
65931	Pimenta	scientist	INS
56232	Perozzo	scientist	STU
847	Yamaguchi	Engineer	STU
49684	Ceze	Engineer	STU
37856	Gay	scientist	STU
70362	Sicard	Engineer	STU
23270	Bouras	scientist	STU

Figure ۱۰_ سوال ۳_ الف

payment_id	customer_id	staff_id	rental_id	amount	payment_date	pay_type
17503	341	2	1520	7.99	2007-02-15 22:25:46.996577	(Null)
17504	341	1	1778	1.99	2007-02-16 17:23:14.996577	(Null)
17505	341	1	1849	7.99	2007-02-16 22:41:45.996577	(Null)
17506	341	2	2829	2.99	2007-02-19 19:39:56.996577	(Null)
17507	341	2	3130	7.99	2007-02-20 17:31:48.996577	(Null)
17508	341	1	3382	5.99	2007-02-21 12:33:49.996577	(Null)
17509	342	2	2190	5.99	2007-02-17 23:58:17.996577	(Null)
17510	342	1	2914	5.99	2007-02-20 02:11:44.996577	(Null)
17511	342	1	3081	2.99	2007-02-20 13:57:39.996577	(Null)
17512	343	2	1547	4.99	2007-02-16 00:10:50.996577	(Null)
17513	343	1	1564	6.99	2007-02-16 01:15:33.996577	(Null)
17514	343	2	1879	0.99	2007-02-17 01:26:00.996577	(Null)
17515	343	2	1922	0.99	2007-02-17 04:32:51.996577	(Null)
17516	343	2	2461	6.99	2007-02-18 18:26:38.996577	(Null)
17517	343	1	2980	8.99	2007-02-20 07:03:29.996577	(Null)
17518	343	1	3407	0.99	2007-02-21 14:42:28.996577	(Null)
17519	344	1	1341	3.99	2007-02-15 10:54:44.996577	(Null)
17520	344	2	1475	4.99	2007-02-15 19:36:27.996577	(Null)
17521	344	1	1731	0.99	2007-02-16 14:00:38.996577	(Null)
17522	345	2	1210	0.99	2007-02-15 01:26:17.996577	(Null)
17523	345	1	1457	4.99	2007-02-15 18:34:15.996577	(Null)
17524	345	2	1550	0.99	2007-02-16 00:27:01.996577	(Null)
17525	345	2	2766	4.99	2007-02-19 16:13:41.996577	(Null)
17526	346	1	1994	5.99	2007-02-17 09:35:32.996577	(Null)
17527	346	2	3372	2.99	2007-02-21 12:02:45.996577	(Null)
17528	346	1	3421	2.99	2007-02-21 15:51:24.996577	(Null)
17529	347	2	1711	8.99	2007-02-16 12:40:18.996577	(Null)
17530	347	2	2274	0.99	2007-02-18 04:59:41.996577	(Null)
17531	347	1	3026	4.99	2007-02-20 10:16:26.996577	(Null)
17532	347	1	3092	8.99	2007-02-20 14:33:08.996577	(Null)

Figure ۱۱ _ سوال ۴ _ ب

month_number	rating	sum_amount	prev_month_sales	next_month_sales
2	G	1422.60	(Null)	3944.62
2	PG	1658.99	(Null)	4757.52
2	PG-13	1856.58	(Null)	5316.63
2	R	1745.78	(Null)	4782.76
2	NC-17	1667.89	(Null)	5085.03
3	G	3944.62	1422.60	5040.03
3	PG	4757.52	1658.99	5725.45
3	PG-13	5316.63	1856.58	6563.76
3	R	4782.76	1745.78	5461.78
3	NC-17	5085.03	1667.89	5768.44
4	G	5040.03	3944.62	104.63
4	PG	5725.45	4757.52	94.69
4	PG-13	6563.76	5316.63	118.59
4	R	5461.78	4782.76	82.71
4	NC-17	5768.44	5085.03	113.56
5	G	104.63	5040.03	(Null)
5	PG	94.69	5725.45	(Null)
5	PG-13	118.59	6563.76	(Null)
5	R	82.71	5461.78	(Null)
5	NC-17	113.56	5768.44	(Null)

Figure ۱۲ _ سوال ۱۰

rental_id	rental_date	inventory_id	customer_id	return_date	staff_id	last_update	check_count
200035	2005-05-24 22:54:48	47	1	2005-06-14 16:22:52	1	2022-12-25 23:27:58.3540	2
76	2005-05-25 11:30:37	3021	1	2005-06-03 12:00:37	2	2022-12-25 23:27:58.3540	2
573	2005-05-28 10:35:23	4020	1	2005-06-03 06:32:23	1	2022-12-25 23:27:58.3540	2
1185	2005-06-15 00:54:12	2785	1	2005-06-23 02:42:12	2	2022-12-25 23:27:58.3540	2
1422	2005-06-15 18:02:53	1021	1	2005-06-19 15:54:53	2	2022-12-25 23:27:58.3540	2
1476	2005-06-15 21:08:46	1407	1	2005-06-25 02:26:46	1	2022-12-25 23:27:58.3540	2
1725	2005-06-16 15:18:57	726	1	2005-06-17 21:05:57	1	2022-12-25 23:27:58.3540	2
2308	2005-06-18 08:41:48	197	1	2005-06-22 03:36:48	2	2022-12-25 23:27:58.3540	2
2363	2005-06-18 13:33:59	3497	1	2005-06-19 17:40:59	1	2022-12-25 23:27:58.3540	2
3284	2005-06-21 06:24:45	4566	1	2005-06-28 03:28:45	1	2022-12-25 23:27:58.3540	2
4526	2005-07-08 03:17:05	1443	1	2005-07-14 01:19:05	2	2022-12-25 23:27:58.3540	2
4611	2005-07-08 07:33:56	3486	1	2005-07-12 13:25:56	2	2022-12-25 23:27:58.3540	2
5244	2005-07-09 13:24:07	3726	1	2005-07-14 14:01:07	2	2022-12-25 23:27:58.3540	2
5326	2005-07-09 16:38:01	797	1	2005-07-13 18:02:01	1	2022-12-25 23:27:58.3540	2
6163	2005-07-11 10:13:46	1330	1	2005-07-19 13:15:46	2	2022-12-25 23:27:58.3540	2
7273	2005-07-27 11:31:22	2465	1	2005-07-31 06:50:22	1	2022-12-25 23:27:58.3540	2
7841	2005-07-28 09:04:45	1092	1	2005-07-30 12:37:45	2	2022-12-25 23:27:58.3540	2
8033	2005-07-28 16:18:23	4268	1	2005-07-30 17:56:23	1	2022-12-25 23:27:58.3540	2
8074	2005-07-28 17:33:39	1558	1	2005-07-29 20:17:39	1	2022-12-25 23:27:58.3540	2
8116	2005-07-28 19:20:07	4497	1	2005-07-29 22:54:07	1	2022-12-25 23:27:58.3540	2
8326	2005-07-29 03:58:49	108	1	2005-08-01 05:16:49	2	2022-12-25 23:27:58.3540	2
9571	2005-07-31 02:42:18	2219	1	2005-08-02 23:26:18	2	2022-12-25 23:27:58.3540	2
10437	2005-08-01 08:51:04	14	1	2005-08-10 12:12:04	1	2022-12-25 23:27:58.3540	2
11299	2005-08-02 15:36:52	3232	1	2005-08-10 16:40:52	2	2022-12-25 23:27:58.3540	2
11367	2005-08-02 18:01:38	1440	1	2005-08-04 13:19:38	1	2022-12-25 23:27:58.3540	2

Figure ۱۳ _ سوال ۸