

Review Questions

1. Discuss each of the following terms: data, field, record, file
2. What is data redundancy, and which characteristics of the file system can lead to it?
3. What is data independence, and why is it important?
4. Explain why database design is important.
5. In the file structure below, how many records does the file contain, and how many fields are there per record?

	PROJECT_CODE	PROJECT_MANAGER	MANAGER_PHONE	MANAGER_ADDRESS	PROJECT_BID_PRICE
▶	21-5Z	Holly B. Parker	904-338-3416	3334 Lee Rd., Gainesville, FL 37123	\$16,833,460.00
	25-2D	Jane D. Grant	615-898-9909	218 Clark Blvd., Nashville, TN 36362	\$12,500,000.00
	25-5A	George F. Dorts	615-227-1245	124 River Dr., Franklin, TN 29185	\$32,512,420.00
	25-9T	Holly B. Parker	904-338-3416	3334 Lee Rd., Gainesville, FL 37123	\$21,563,234.00
	27-4Q	George F. Dorts	615-227-1245	124 River Dr., Franklin, TN 29185	\$10,314,545.00
	29-2D	Holly B. Parker	904-338-3416	3334 Lee Rd., Gainesville, FL 37123	\$25,559,999.00
	31-7P	William K. Moor	904-445-2719	216 Morton Rd., Stetson, FL 30155	\$56,850,000.00

6. Identify and discuss the data redundancy problems exhibited by the file structure shown below.

	PROJ_NUM	PROJ_NAME	EMP_NUM	EMP_NAME	JOB_CODE	JOB_CHG_HOUR	PROJ_HOURS	EMP_PHONE
▶	1	Hurricane	101	John D. Newson	EE	\$85.00	13.3	653-234-3245
	1	Hurricane	105	David F. Schwann	CT	\$60.00	16.2	653-234-1123
	1	Hurricane	110	Anne R. Ramoras	CT	\$60.00	14.3	615-233-5568
	2	Coast	101	John D. Newson	EE	\$85.00	19.8	653-234-3254
	2	Coast	108	June H. Sattlemir	EE	\$85.00	17.5	905-554-7812
	3	Satellite	110	Anne R. Ramoras	CT	\$62.00	11.6	615-233-5568
	3	Satellite	105	David F. Schwann	CT	\$26.00	23.4	653-234-1123
	3	Satellite	123	Mary D. Chen	EE	\$85.00	19.1	615-233-5432
	3	Satellite	112	Allecia R. Smith	BE	\$85.00	20.7	615-678-6879

7. Looking at the EMP_NAME and EMP_PHONE contents in the file structure above, what change(s) would you recommend?
8. Given the file structure shown below, what problem(s) might you encounter if building KOM were deleted?

	BUILDING_CODE	ROOM_CODE	TEACHER_LNAME	TEACHER_FNAME	TEACHER_INITIAL	DAYS&TIME
▶	KOM	204E	Williston	Horace	G	MWTF 8:00-8:50
	KOM	123	Cordoza	Maria	L	MWTF 8:00-8:50
	LDB	504	Patroski	Donald	J	TTh 1:00-2:15
	KOM	34	Hawkins	Anne	W	MWTF 10:00-10:50
	JKP	225B	Risell	James		TTh 9:00-10:15
	LDB	301	Robertson	Jeanette	P	TTh 9:00-10:15
	KOM	204E	Cordoza	Maria	I	MWTF 9-9:50
	LDB	504	Williston	Horace	G	TTh 1:00-2:15
	KOM	34	Cordoza	Maria	L	MWTF 11:11:50
	LDB	504	Patroski	Donald	J	MWTF 2:00-2:50