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1  # Name: Sahib Bajwa
2  |
3  # Question 1
4  • CREATE SCHEMA ClassAssignment;
5
6  # Question 2
7  • CREATE TABLE Project (
8      `project_num` INT(10) NOT NULL PRIMARY KEY,
9      `project_code` CHAR(4),
10     `project_title` VARCHAR(45),
11     `first_name` VARCHAR(45),
12     `last_name` VARCHAR(45),
13     `project_budget` DECIMAL(5,2)
14 );
15
16 #desc Project;
17
18 # Question 3
19 • ALTER TABLE Project MODIFY COLUMN project_num INT(10) AUTO_INCREMENT;
20 • ALTER TABLE Project AUTO_INCREMENT = 10;
21
22 #desc Project;
23
24 # Question 4
25 • ALTER TABLE Project MODIFY COLUMN project_budget DECIMAL(10,2);
26
27 #desc Project;
28
29 # Question 5
30 • INSERT INTO Project (project_code, project_title, first_name, last_name, project_budget)
31 VALUES
32     ('PC01', 'DIA', 'John', 'Smith', 10000.99),
33     ('PC02', 'CHF', 'Tim', 'Cook', 12000.50),
34     ('PC03', 'AST', 'Rhonda', 'Smith', 8000.40);
35
36 #SELECT * FROM Project;
37
38 # Question 6
39 • CREATE TABLE PayRoll (
40     `employee_num` INT(10) PRIMARY KEY AUTO_INCREMENT,
41     `job_id` INT(10) NOT NULL,
42     `job_desc` VARCHAR(40),
43     `emp_pay` DECIMAL(10,2)
44 );
45
46 #desc PayRoll;
47
48 # Question 7
49 • ALTER TABLE PayRoll ADD CONSTRAINT ValGrt CHECK (emp_pay > 10000);
50 • ALTER TABLE PayRoll ALTER job_desc SET DEFAULT 'Data Analyst';
51 • ALTER TABLE PayRoll ADD pay_date DATE AFTER job_desc;
52
53 #desc PayRoll;
54
55 # Question 8
56 • ALTER TABLE PayRoll ADD CONSTRAINT FK_A_B FOREIGN KEY (job_id) REFERENCES Project (project_num);
57
58 # Question 9
59 • INSERT INTO PayRoll (job_id, pay_date, emp_pay)
60 VALUES
61     (10, curdate(), 12000.99),
62     (11, curdate(), 14000.99),

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63      (12, curdate(), 16000.99);
64
65  #SELECT * FROM PayRoll;
66
67  # Question 10
68  • UPDATE PayRoll SET emp_pay = (emp_pay + (emp_pay * 0.1)) WHERE employee_num = 2;
69
70  #SELECT * FROM PayRoll;
71
72  # Question 11
73  • CREATE TABLE Project_backup (
74      `project_num` INT(10) NOT NULL PRIMARY KEY,
75      `project_code` CHAR(4),
76      `project_title` VARCHAR(45),
77      `first_name` VARCHAR(45),
78      `last_name` VARCHAR(45),
79      `project_budget` DECIMAL(5,2)
80  );
81
82  • ALTER TABLE Project_backup MODIFY COLUMN project_num INT(10) AUTO_INCREMENT;
83  • ALTER TABLE Project_backup AUTO_INCREMENT = 10;
84  • ALTER TABLE Project_backup MODIFY COLUMN project_budget DECIMAL(10,2);
85
86  • INSERT INTO Project_backup SELECT project_num, project_code, project_title, first_name, last_name, project_budget FROM Project WHERE last_name = 'Smith';
87
88  #Select * FROM Project_backup; Select * From Project;
89
90  # Question 12
91  • CREATE VIEW PayRoll_View AS
92      Select job_id, job_desc, pay_date FROM PayRoll WHERE job_id > 10;
93
94  #Select * FROM PayRoll_View; Select * FROM PayRoll;
95
96  # Question 13
97  • CREATE INDEX IX_Name ON PayRoll (pay_date);
98
99  #SHOW INDEX FROM PayRoll;
100
101  # Question 14
102  • TRUNCATE project_backup;
103
104  #Select * FROM Project_backup; Select * FROM Project;
105
106  # Question 15
107  • DELETE FROM Project WHERE project_num = 10;
108
109  # This script fails because we cannot delete the row from the parent table while there is a reference to the row in the child table.
110  # We need either remove that row in the child table OR temporarily stop the foreign key check while we delete the row in the parent table.
111
112  # Question 16
113  • SET FOREIGN_KEY_CHECKS = 0;
114  • DELETE FROM Project WHERE project_num = 10;
115  • SET FOREIGN_KEY_CHECKS = 1;
116
117  #SELECT * FROM Project;

```