

€•, •f„ ... †† ^%Š%: Manipulating Data (DML)

< •€„ •f^ 1

1. • †Ž••• ^% f†•†† †^€„, f„ • • †^, %• IT.
2. • †Ž••• ^% †^, %• 'Finance' Ž%- Š%f%, —%€• „ Ž%- location_id.
3. • †Ž••• ^% †^€„, f„ • • ^%„ „ ~ %™, • ^†™ †€„ šŠ• f• €• Ž†^„ (SYSDATE).
4. < ^••• ^% †^€„ „ ††•—†•f„ %Š TO_DATE, •... , • ^> .
5. æ" ††„ €™ ^% †^€„, f„ †• — †^, %• Sales • f†• • ^•Ž• „ Ž" sales_reps.
6. ÝŽf†• „ ^% —€†•• ^„ †^€„, f„ • • 101, † 6500.
7. ÝŽf†• „ ^% commission_pct †^€„, f„ • • 102 f• 0.2.
8. ÝŽf†• „ ^% €•Ž†^„ „ —€†•• ^„ †^€„, f„ • • 103, ' „ ††„ €†•• „ †^ †^€„, f„ • • 104.
9. j —Š%f„ ^% †^, %• • • % †^€„, f„ †• † department_id = 20 f• 30.
10. €, • „ ^% †^€„, f„ • • employee_id = 103.
11. €, • „ ^% • • % †^€„ „ — ^•Ž• „ Ž> departments, ', % location_id = 1800.
12. €, • „ ^% • • % †^€„ „ — f†•†™ ^•Ž• „ Ž> sales_reps.
13. j ††•—™ ^% TRUNCATE, •... ^•Ž• „ Ž> sales_reps.
14. < ^••• ^% †^€„ „ > ††•f„ ^% ROLLBACK € †€†•%€• ^%, æ†† †^€„ • „ †^%—••.
15. <> ††•f„ ^% SELECT ... FOR UPDATE, •... • • % †^€„, f„ †• †^, %• Sales.

< •€„ •f^ 2

1. < ^••• ^% f†•†† †^€„, f„ • • †^, %• Marketing.
2. • †Ž••• ^% †^, %• 'Training' † NULL —f•æ%f„ ...Š„ .
3. < ^••• ^% †^€„ „ ††•—†•f„ %Š SYSDATE.
4. < ^••• ^% †^€„ „ †^€„ „ €†••f††™, • ^†™ † TO_DATE('APR 15, 2023', 'MON DD, YYYY').
5. æ" ††„ €™ ^% • • % †^€„, f„ †• • ^•Ž• „ Ž" all_employees_archive.
6. ÝŽf†• „ ^% —€†•• ^„ • • % †^€„, f„ †• †^, %• • 40, „ • %• „ æ„ • f• 10%.
7. | —f•æ• ^% • • % Š †^€„, f„ • • Š Ž%- commission_pct —f•æ%f„ % 0.05.
8. ÝŽf†• „ ^% †^, %• †^€„, f„ • • 102 f• ^†^, ', % €•Ž†^• ^ 103.
9. €, • „ ^% †^€„, f„ †• — †^, %• IT.
10. €, • „ ^% †^, %• 'Marketing'.
11. €, • „ ^% • • % †^€„, f„ †• † —€†•• ^†™ f„ —% 6000.
12. €, • „ ^% • • % †^€„ „ — all_employees_archive.
13. <> ††•f„ ^% TRUNCATE TABLE all_employees_archive.
14. j ††•—™ ^% SAVEPOINT †%€%, UPDATE „ > ††•f„ ^% ROLLBACK TO ††• • % „ —Š%f%f„
15. <> ††•f„ ^% SELECT * FROM employees WHERE job_id = 'SA_REP' FOR UPDATE.

< •€„ •f^ 3

1. • †Ž••• ^% †^€„, f„ • • †^, %• 10, „ —•• ^†•• † †Ž...—^%••f> % ††•....
2. • †Ž••• ^% †^, %• 'Support' † †f" €^f> Š location_id.
3. < ^••• ^% †^€„, f„ • • SYSDATE.
4. • †Ž••• ^% †^€„ „ †Š„ ' „ %™ NULL.
5. æ" ††„ €™ ^% • • % †^€„, f„ †• † job_id LIKE '%REP%' • ^•Ž• „ Ž" reps_copy.
6. €•%„ „ æ• ^% —€†•• ^„ †^€„, f„ • • 104 f• 15%.
7. j —Š%f„ ^% job_id • • % †^€„, f„ †• †^, %• • 30 f• 'IT_PROG'.
8. ÝŽf†• „ ^% manager_id • • % †^€„, f„ †• f• 205.
9. €, • „ ^% • • % †^€„, f„ †• † job_id = 'MK_REP'.
10. €, • „ ^% †^, %• † department_id = 20.
11. €, • „ ^% • • % †^€„, f„ †• †, ', % „ †Š„ ' „ ... Ž†••Š% 0.1.
12. <> ††•f„ ^% DELETE ††††, —†€† „ : „ • „ ^% ^% „ ^† €•Ž†^• ^ • 'Sales'.

13. j '††••—"™% TRUNCATE , •... ^•Ž•„ž> reps_copy.
14. æ, %•••™% INSERT, SAVEPOINT, –•%Š ROLLBACK TO.
15. <> ††•f„ ^% SELECT ' FOR UPDATE „ " "•—„ ^% "†f" (E% ^f>™ ' ^†•Ž%ž FOR UPDATE OF salary.

<•E„•f^ 4

1. <' ^••••^% '†^E„, f„ "••†^, %• 20 ' null--f•%f„...Š„ , •... manager_id.
2. •†Ž••••^%†^, %• 'Legal'.
3. <' ^••••^% ' ^E†" " ' TO_DATE f• Š•E^ 2022.
4. •†Ž••••^%†^E„, f„ "• Ž%— "†Š„ ' ' „ „ .
5. æ"††„E"™% '†^E„, f„ "†•• ^•Ž•„ž" employees_backup.
6. ``†> Š%f„ %—•E†••^> f• 20% ^%Š, " "†† job_id f•%f•% ^' ... ' 'SA_'.
7. ŽŽf"•„ ^% commission_pct " •' % , " "††††f• %' ^•.
8. ŽŽf†•„ ^% department_id†† " '†••• %%(E%—††, –•†E†'.
9. ¢, ••„ ^% '†^E„, f„ "†• ' job_id IN ('SA_MAN', 'MK_REP').
10. ¢, ••„ ^%†^, %•> , " "††E> f% ^ manager_id.
11. ¢, ••„ ^% '†^E„, f„ "†•, †E„f... ^> , † 2022 '†, •.
12. ¢, ••„ ^% — employees_backup •' % , %... –•E†•• ^• Š%f•Š % 7000.
13. <> ††•f„ ^% TRUNCATE employees_backup.
14. j '††••—"™% COMMIT ††' •%f% ' "†••" „ INSERT.
15. <> ††•f„ ^% SELECT ... FOR UPDATE ' " '•†•„ %Š location_id = 1700.

<•E„•f^ 5

1. •†Ž••••^% ' ^E†" " ' ¥„ " „ E†••ff> Š„ –f•%f„...Š„ .
2. •†Ž••••^%†^, %• 'Security' ' NULL††...Š„ .
3. <' ^••••^% '†^E„, f„ "•, " "††E††††^†••"† „ Š... „†^, %•.
4. <' ^••••^% ' ^E†" " " , •^†™ %%(E%— TO_DATE.
5. æ"††„E"™% '†^E„, f„ "†• ' –•E†•• ^†™ > 7000 • high_salary_emp.
6. ¢•%•„ %• ^%—•E†•• ^" f• 5% •' %Š, " ^† E•Ž† ^•% ^•†^, %•% 30.
7. ŽŽf†•„ ^% E•Ž† ^" „ –•E†•• ^" •' %Š, " ^†††, %„f...% ^' ... Š%f%, —%E" 201.
8. ŽŽf"•„ ^% –•E†•• ^" ^%Š, " ^† E•Ž† ^•% ^• 'Administration'.
9. ¢, ••„ ^% '†^E„, f„ "†•, " "††E> f% ^ department_id.
10. ¢, ••„ ^%†^, %•• ' department_id = 10.
11. ¢, ••„ ^%•' % '†^E„, f„ "†•, " "††† „ Š... f•%„f•% ^' ... f• 'L'.
12. ¢, ••„ ^%•' % „ – high_salary_emp.
13. TRUNCATE high_salary_emp.
14. j '††••—"™% SAVEPOINT „ •> ††•f„ ^%†^" • ^††' •% UPDATE.
15. <> ††•f„ ^% SELECT ' FOR UPDATE , •... •' % '†^E„, f„ "†• ' –•E†•• ^†™ > 6000.