**Business Automation Ltd.**  
MySQL Query Implementation

1. **Creating a table with sl, first\_name, last\_name, salary:**

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| 1. **CREATE** **TABLE** employees ( 2. SL **INT** **PRIMARY** **KEY**, 3. first\_name **VARCHAR**(50), 4. last\_name **VARCHAR**(50), 5. salary **DECIMAL**(10, 2) 6. ); 8. **INSERT** **INTO** employee (SL, first\_name, last\_name, salary) **VALUES** 9. (1, 'John', 'Doe', 50000.00), 10. (2, 'Jane', 'Smith', 60000.00), 11. (3, 'Michael', 'Johnson', 55000.00), 12. (4, 'Emily', 'Brown', 58000.00), 13. (5, 'David', 'Wilson', 52000.00), 14. (6, 'Sarah', 'Taylor', 63000.00), 15. (7, 'James', 'Anderson', 54000.00), 16. (8, 'Jennifer', 'Martinez', 59000.00), 17. (9, 'William', 'Thomas', 57000.00), 18. (10, 'Jessica', 'Garcia', 61000.00); |  |

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| 1. **SELECT** AVG(salary) **FROM** employee; |  |

**Showing list of worker who's salary is greater than average alary:**

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| 1. **SELECT** sl, first\_name, last\_name, salary 2. **FROM** employee 3. **WHERE** salary>( **SELECT** AVG(salary) **FROM** employee; |  |

1. **Showing list of worker who's first\_name start with vowel and last\_name end with vowel:**

**Adding some row first:**

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| 1. **INSERT** **INTO** employee (SL, first\_name, last\_name, salary) **VALUES** 2. (16, 'aohn', 'Doe', 50000), 3. (17, 'eohn', 'aoe', 60000), 4. (18, 'ohn', 'ioe', 60000), 5. (19, 'iohn', 'Dogde', 70000), 6. (20, 'ohn', 'Dosda', 80000); |  |

**Showing the query result:**

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| 1. **SELECT** sl, first\_name, last\_name, salary 2. **FROM** employee 3. **WHERE** 4. (LOWER(SUBSTRING(first\_name, 1, 1)) IN ('a', 'e', 'i', 'o', 'u')) 5. AND 6. (LOWER(RIGHT(last\_name, 1)) IN ('a', 'e', 'i', 'o', 'u')); |  |

1. **Showing list of worker who's salary is greater than lowest salary and less than highest salary:**

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| 1. **SELECT** SL, first\_name, last\_name, salary 2. **FROM** employee 3. **WHERE** salary BETWEEN 4. (**SELECT** **MIN**(salary) **FROM** employee) 5. AND 6. (**SELECT** **MAX**(salary) **FROM** employee); |  |

1. **Creating salary history table with salary, worker\_id, paid unpaid status:**

**Creating the salary history table:**

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| 1. INSERT INTO history (worker\_id, salary, status) VALUES 2. (1, 50000, 'paid'), 3. (2, 50000, 'unpaid'), 4. (3, 60000, 'paid'), 5. (4, 55000, 'paid'), 6. (5, 58000, 'unpaid'), 7. (6, 52000, 'unpaid'), 8. (7, 63000, 'paid'), 9. (8, 54000, 'unpaid'), 10. (9, 59000, 'paid'), 11. (10, 57000, 'paid'), 12. (11, 61000, 'unpaid'), 13. (12, 50000, 'paid'), 14. (13, 60000, 'paid'), 15. (14, 60000, 'unpaid'), 16. (15, 70000, 'unpaid'), 17. (16, 80000, 'paid'), 18. (17, 50000, 'unpaid'), 19. (18, 60000, 'paid'), 20. (19, 60000, 'unpaid'), 21. (20, 70000, 'paid'); |  |

**Showing the total paid amount untill today of every worker with worker name:**

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| 1. SELECT 2. e.worker\_id, 3. e.first\_name, 4. e.last\_name, 5. SUM(h.salary) AS total\_paid\_amount 6. FROM 7. history h 8. JOIN 9. employee e ON h.worker\_id = e.worker\_id 10. WHERE 11. h.status = 'paid' 12. GROUP BY 13. e.worker\_id, e.first\_name, e.last\_name; |  |

1. **Menu Table and Self Join:**

**Creating the menu table:**

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| 1. CREATE TABLE menu ( 2. id INT PRIMARY KEY, 3. name VARCHAR(100), 4. parent\_id INT, 5. FOREIGN KEY (parent\_id) REFERENCES menu(id) 6. ); 8. INSERT INTO menu (id, name, parent\_id) VALUES 9. (1, 'Home', NULL), 10. (2, 'About', NULL), 11. (3, 'Products', NULL), 12. (4, 'Services', NULL), 13. (5, 'Contact', NULL), 14. (6, 'Our Team', 2), 15. (7, 'History', 2), 16. (8, 'Mission', 2), 17. (9, 'Vision', 2), 18. (10, 'Product A', 3), 19. (11, 'Product B', 3), 20. (12, 'Service A', 4), 21. (13, 'Service B', 4); |  |

**Self Join**

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| 1. SELECT m1.name AS menu\_name, COALESCE(m2.name, 'No parent') AS parent\_menu\_name 2. FROM menu m1 3. LEFT JOIN menu m2 ON m1.parent\_id = m2.id; |  |

1. **Practicing like and wildcard:**

**Creating the table:**

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| 1. CREATE TABLE practice ( 2. id INT PRIMARY KEY AUTO\_INCREMENT, 3. example\_text VARCHAR(100) 4. );  7. INSERT INTO practice VALUES 8. ('apple'), 9. ('apple%'), 10. ('%apple'), 11. ('a%e'), 12. ('a\_e'), 13. ('[aeiou]%'), 14. ('[a-z]'), 15. ('^[%aeiou]'), 16. ('a-z'), 17. ('{apple,orange}'); |  |

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| 1. SELECT \* FROM practice WHERE example\_text LIKE 'apple%'; |  |

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| 1. SELECT \* FROM practice WHERE example\_text LIKE 'a\_e'; |  |

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| 1. SELECT \* FROM practice WHERE example\_text LIKE '[aeiou]%'; |  |

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| 1. SELECT \* FROM practice WHERE example\_text LIKE '^[%aeiou]'; |  |

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| 1. SELECT \* FROM practice WHERE example\_text IN ('apple', 'orange'); |  |

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| 1. SELECT \* FROM practice WHERE example\_text LIKE '[a-z]'; |  |