

Essential Steps: Begin by selecting a Database from the dropdown menu located in the top bar. Next, prompt the model to generate SQL tailored to the chosen database. Once the SQL is generated, you can seamlessly integrate it into your notebook and execute it to verify the results.

Detailed Information: Find comprehensive instructions, sample questions, queries, and schemas for all six databases below.

1. Instructions for Users for Apartment Rentals DB

Ask the model for information about specific apartments, including details like type, address, manager, and facilities. Inquire about guests staying in certain apartments, their genders, and birth dates. Request booking statuses, start and end dates, and availability of apartments. You can also ask about apartment buildings, their names, descriptions, and managers. Feel free to seek data on apartment bookings, their IDs, statuses, and associated guests. Finally, explore the database for apartment facilities, their codes, and associations with specific apartments.

Database Schema for Apartment Rentals DB

Following are the table names and their corresponding columns:

Apartment_Buildings:

- building_id
- building_short_name
- building_full_name
- building_description
- building_address
- building_manager
- building_phone

Apartments:

- apt_id
- building_id
- apt_type_code
- apt_number
- bathroom_count
- bedroom_count
- room_count

Apartment_Facilities:

- apt_id
- facility_code

Guests:

- guest_id
- gender_code
- guest_first_name
- guest_last_name

- date_of_birth

Apartment_Bookings:

- apt_booking_id
- apt_id
- guest_id
- booking_status_code
- booking_start_date
- booking_end_date

View_Unit_Status:

- apt_id
- apt_booking_id
- status_date
- available_yn

Sample Questions and their corresponding SQL for Apartment Rentals DB

User Questions	Generated SQL
List all apartment buildings with their managers' names	<pre>select apartment_buildings.building_manager from Apartment_Buildings</pre>
List all apartments that are currently available	<pre>select view_unit_status.apt_id, view_unit_status.available_yn from View_Unit_Status</pre>
Find the total number of bookings made for each apartment type	<pre>select apartments.apt_type_code, count(*) from Apartment_Bookings join Apartments on Apartment_Bookings.apt_id = Apartments.apt_id group by apartments.apt_type_code</pre>

List the guests who made bookings and their corresponding apartment numbers	<pre> select apartment_bookings.guest_id, apartments.apt_number from Apartment_Bookings join Apartments on Apartment_Bookings.apt_id = Apartments.apt_id </pre>
Find the average number of rooms in each building	<pre> select avg(apartments.room_count), apartment_buildings.building_id from Apartments join Apartment_Buildings on Apartments.building_id = Apartment_Buildings.building_id group by apartment_buildings.building_id </pre>

2. Instructions for Users for Ascent DB

Inquire the model about applications by accessing details such as their ID, creation and expiry dates, types, and statuses, along with associated dealers, salespersons, contract payers, and contact persons. Explore brand, part, business license information, and sales manager details tied to applications. Additionally, retrieve supplementary data from the Applications Additional table including first payment and E-Sign dates, insurer details, and business processes. Query invoice-related information such as ID, date, number, amount, currency, business partner and role, type, status, company, branch, and due date. Lastly, retrieve contract details such as ID, creation and activation dates, types, start and end dates, numbers, maturity dates, and associated commercial contract types, companies, interests, branches, closing dates, and sold dates.

Database Schema for Ascent DB

Following are the table names and their corresponding columns:

Applications:

- Application ID
- Application Number
- Application Creation Date
- Application Expiry Date
- Application Type ID
- Application Type Key
- Dealer ID
- Sales Person ID
- Contract Payer
- Contact Person ID
- Navigation Agreement Indicator

- Contract Start Date
- Status Key
- Brand ID
- Part ID
- Business License Name
- Business License Address
- Sale Manager ID

Applications additional:

- Application Additional ID
- Application ID
- First Payment Date
- E-Sign Date
- Insured By
- Updated By
- Insured Date
- Updated Date
- Business Process ID
- Loan Purpose ID
- E-Sign Credit Connect Date
- Finance Admin ID
- Contract Number
- Customer Segment Type ID

Invoices:

- Invoice ID
- Business Partner ID
- Business Partner Role ID
- Invoice Date
- Invoice Number
- Currency ID
- Invoice Amount
- Gross Invoice Amount
- Contract ID
- Asset ID
- Insured Date
- Updated Date
- Invoice Type ID
- Status Key
- Company ID
- Branch ID
- Invoice Due Date

Contracts:

- Contract ID
- Commercial Contract Type ID
- Company ID
- Contract Creation Date
- Interest ID
- Interest Branch ID
- Contract Activation Date
- Contract Type ID
- Contract Start Date
- Contract End Date
- Contract Number
- Contract Maturity Date
- Contract Closing Date
- Sold Date

Sample Questions and their corresponding SQL for Ascent DB

User Questions	Generated SQL
how many applications do we have with applicant type key of individual ?	<pre>select count(*) from appl` where appl.apct_type_key = "Individual"</pre>
how many applications do we have ?	<pre>select count(*) from appl</pre>
what are unique values in applicant type id column ?	<pre>select count(distinct appl.appl_type_id) from appl</pre>

What are the application numbers, currency id, and contract start date for every application in descending order of application creation date?	<pre> select appl.appl_numbr, appl.crcy_id, appl.cont_strt_dte from appl order by appl.appl_crte_dte desc </pre>
what are distinct Navigation Agreement Indicator in applications	<pre> select distinct appl.nvtm_agrt_ind from appl </pre>

3. Instructions for Users for cre_Doc_Template_Mgt DB

Inquire about template types by accessing their code and description from the Ref_Template_Types table. Retrieve templates' details including ID, version number, type code, effective dates, and details from the Templates table. Seek document-related information such as ID, template ID, name, description, and additional details from the Documents table. Explore paragraph details including ID, document ID, text, and other details from the Paragraphs table. Use these queries to gather comprehensive information on template types, templates, documents, and paragraphs stored in the database.

Database Schema for cre_Doc_Template_Mgt DB

Following are the table names and their corresponding columns:

Ref_Template_Types:

- Template_Type_Code
- Template_Type_Description

Templates:

- Template_ID
- Version_Number
- Template_Type_Code
- Date_Effective_From
- Date_Effective_To
- Template_Details

Documents:

- Document_ID
- Template_ID

- Document_Name
- Document_Description
- Other_Details

Paragraphs:

- Paragraph_ID
- Document_ID
- Paragraph_Text
- Other_Details

**Sample Questions and their corresponding SQL for
cre_Doc_Template_Mgt DB**

User Questions	Generated SQL
Count the number of documents.	<pre>select count(*) from Documents</pre>
List document IDs, document names, and document descriptions for all documents.	<pre>select documents.document_id, documents.document_name, documents.document_description from Documents</pre>
What is the document id, template id and description for document named \"Robbin CV\"?	<pre>select documents.document_id, documents.template_id, documents.document_description from Documents where documents.document_name = \"Robbin CV\"</pre>
How many documents are using the template with type code 'PPT'?	<pre>select count(*) from Documents join Templates on Documents.Template_ID = Templates.Template_ID where templates.template_type_code = \"PPT\"</pre>

Return the type code of the template type that the most templates belong to.	<pre> select templates.template_type_code from Templates group by templates.template_type_code order by count(*) desc limit 1 </pre>
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4. Instructions for Users for employee_hire_evaluation DB

Investigate employee details such as ID, name, age, and city from the employee table. Explore shop information including ID, name, location, district, number of products, and manager name stored in the shop table. Access hiring data to determine the shop and employee involved, their start date, and whether the position is full-time from the hiring table. Retrieve evaluations by employee ID and year awarded, along with bonus details from the evaluation table. Utilize these queries to gather comprehensive insights into employee, shop, hiring, and evaluation data within the database.

Database Schema for employee_hire_evaluation DB

Following are the table names and their corresponding columns:

Employee:

- Employee_ID
- Name
- Age
- City

Shop:

- Shop_ID
- Name
- Location
- District
- Number_products
- Manager_name

Hiring:

- Shop_ID
- Employee_ID
- Start_from
- Is_full_time

Evaluation:

- Employee_ID

- Year_awarded
- Bonus

Sample Questions and their corresponding SQL for employee_hire_evaluation DB

User Questions	Generated SQL
List the names of employees and sort in ascending order of age.	<pre>select employee.name from employee order by employee.age asc</pre>
Which cities do more than one employee under age 30 come from?	<pre>select employee.city from employee group by employee.city having count(*) > 1</pre>
Find the manager name and district of the shop whose number of products is the largest.	<pre>select shop.manager_name, shop.district from shop order by shop.number_products desc limit 1</pre>
find the name of employee who was awarded the most times in the evaluation.	<pre>select employee.name from evaluation join employee on evaluation.Employee_ID = employee.Employee_ID group by evaluation.employee_id order by count(*) desc limit 1</pre>

What is the name of the shop that is hiring the largest number of employees?	<pre> select shop.name from hiring join shop on hiring.Shop_ID = shop.Shop_ID group by hiring.shop_id order by count(*) desc limit 1 </pre>
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5. Instructions for Users for real_estate_properties DB

Investigate feature types by accessing their code and name from the Ref_Feature_Types table. Retrieve property types along with their codes and descriptions from the Ref_Property_Types table. Explore available features including their IDs, type codes, names, and descriptions stored in the Other_Available_Features table. Access property details such as ID, type code, dates on market and sold, name, address, room count, vendor requested price, buyer offered price, agreed selling price, and additional features from the Properties table. Additionally, gather information about property features including IDs, feature IDs, and descriptions from the Other_Property_Features table. Utilize these queries to gain insights into feature types, property types, available features, properties, and property features within the database.

Database Schema for real_estate_properties DB

Following are the table names and their corresponding columns:

Ref_Feature_Types:

- feature_type_code
- feature_type_name

Ref_Property_Types:

- property_type_code
- property_type_description

Other_Available_Features:

- feature_id
- feature_type_code
- feature_name
- feature_description

Properties:

- property_id
- property_type_code
- date_on_market

- date_sold
- property_name
- property_address
- room_count
- vendor_requested_price
- buyer_offered_price
- agreed_selling_price
- apt_feature
- fld_feature

Other_Property_Features:

- property_id
- feature_id
- property_feature_description

Sample Questions and their corresponding SQL for real_estate_properties DB

User Questions	Generated SQL
How many available features are there in total?	<pre>select count(*) from Other_Available_Features</pre>
What is the feature type name of feature AirCon?	<pre>select ref_feature_types.feature_type_name from Other_Available_Features join Ref_Feature_Types on Other_Available_Features.feature_type_code = Ref_Feature_Types.feature_type_code where other_available_features.feature_name = "AirCon"</pre>
Show the property type descriptions of properties belonging to that code.	<pre>select ref_property_types.property_type_description from Properties join Ref_Property_Types on Properties.property_type_code = Ref_Property_Types.property_type_code where properties.property_type_code = "1"</pre>

What are the names of properties that are either houses or apartments with more than 1 room?	<pre> select properties.property_name from Properties where properties.property_type_code = "House" union select properties.property_name from Properties where properties.property_type_code = "Apartment" and properties.room_count > 1 </pre>
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6. Instructions for Users for student_transcripts_tracking DB

Retrieve address details such as ID, line, city, zip/postcode, state/province/county, country, and additional details from the Addresses table. Access course information including ID, name, description, and additional details from the Courses table. Explore department details such as ID, name, description, and additional details stored in the Departments table. Retrieve degree program information including ID, department ID, summary name, description, and additional details from the Degree_Programs table. Access section details such as ID, course ID, name, description, and additional details from the Sections table. Additionally, gather student information including ID, current and permanent address IDs, name, contact details, SSN, registration and leaving dates, and other details from the Students table. Retrieve student enrollment data including ID, degree program ID, semester ID, student ID, and other details from the Student_Enrolment table. Utilize these queries to gain insights into addresses, courses, departments, degree programs, sections, students, and student enrollments within the database.

Database Schema for student_transcripts_tracking DB

Following are the table names and their corresponding columns:

Addresses:

- address_id
- line
- city
- zip_postcode
- state_province_county
- country
- other_address_details

Courses:

- course_id
- course_name
- course_description
- other_details

Departments:

- department_id
- department_name
- department_description
- other_details

Degree_Programs:

- degree_program_id
- department_id
- degree_summary_name
- degree_summary_description
- other_details

Sections:

- section_id
- course_id
- section_name
- section_description
- other_details

Students:

- student_id
- current_address_id
- permanent_address_id
- first_name
- middle_name
- last_name
- cell_mobile_number
- email_address
- ssn
- date_first_registered
- date_left
- other_student_details

Student_Enrolment:

- student_enrolment_id
- degree_program_id
- semester_id
- student_id
- other_details

Sample Questions and their corresponding SQL for student_transcripts_tracking DB

User Questions	Generated SQL
How many courses in total are listed?	<pre>select count(*) from Courses</pre>
How is the math course described?	<pre>select courses.course_description from Courses where courses.course_name = "math"</pre>
Which department offers the most number of degrees? List department name and id.	<pre>select departments.department_name, departments.department_id from Degree_Programs join Departments on Degree_Programs.department_id = Departments.department_id group by degree_programs.department_id order by count(*) desc limit 1</pre>
How many different departments offer degrees?	<pre>select count(distinct degree_programs.department_id) from Degree_Programs</pre>
How many degrees does the engineering department offer?	<pre>select count(*) from Degree_Programs join Departments on Degree_Programs.department_id = Departments.department_id where departments.department_name = "Engineering"</pre>