

```
prompt="""### Task
Generate a SQL query to answer [QUESTION]{question}[/QUESTION]

### Instructions
-If you cannot answer the question with the available database schema,
return 'I do not know'
-Remember that revenue is price multiplied by quantity
-Remember that cost is supply_price multiplied by quantity

### Database Schema
This query will run on a database whose schema is represented in this
string:
CREATE TABLE products (
  product_id INTEGER PRIMARY KEY, --Unique ID for each product
  name VARCHAR(50), --Name of the product
  price DECIMAL (10,2), --Price of each unit of the product
  quantity INTEGER --Current quantity in stock
);

CREATE TABLE customers (
  customer_id INTEGER PRIMARY KEY, --Unique ID for each customer
  name VARCHAR(50), --Name of the customer
  address VARCHAR(100) --Mailing address of the customer
);

CREATE TABLE salespeople (
  salesperson_id INTEGER PRIMARY KEY, --Unique ID for each salesperson
  name VARCHAR(50), --Name of the salesperson
  region VARCHAR(58) --Geographic sales region
);

CREATE TABLE sales (
  sale_id INTEGER PRIMARY KEY, --Unique ID for each sale
  product_id INTEGER, --ID of product sold
  customer_id INTEGER, --ID of customer who made purchase
  salesperson_id INTEGER, --ID of salesperson who made the sale
  sale_date DATE, --Date the sale occurred
  quantity INTEGER, --Number of units sold
);
```

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CREATE TABLE product_suppliers (
    supplier_id INTEGER PRIMARY KEY, --Unique ID for each supplier
    product_id INTEGER, --Product ID supplied
    supply_price DECIMAL(10,2) --Unit price charged by supplier
);

--sales.product_id can be joined with products.product_id
--sales.customer_id can be joined with customers.customer_id
--sales.salesperson_id can be joined with salespeople.salesperson_id
--product_suppliers.product_id can be joined with products.product_id

### Answer
Given the database schema, here is the SQL query that answers
[QUESTION]{question}[/QUESTION]
[SQL] I
"""

import sqlparse
def generate_query(question):
    updated_prompt = prompt.format(question=question)
    inputs = tokenizer(updated_prompt, return_tensors="pt").to("cuda")
    generated_ids = model.generate(
        **inputs,
        num_return_sequences=1,
        eos_token_id=tokenizer.eos_token_id,
        pad_token_id=tokenizer.eos_token_id,
        max_new_tokens = 400,
        do_sample=False,
        num_beams=1,
    )
    outputs= tokenizer.batch_decode(generated_ids, skip_special_tokens=True)

    torch.cuda.empty_cache()
    torch.cuda.synchronize()
    #empty cache so that you do generate more results w/o memory crashing
    # particularly important on Colab memory management is much more
straightforward
    #when running on an inference service
    return sqlparse.format(outputs[0].split("[SQL]") [-1], reindent=True)

```