1. **Please describe the architecture of the current chatbot system. Identify the components and check where are they running now.**

Ans: Telegram Bot API: This API allows the chatbot to interact with Telegram users by sending and receiving messages

Updater: This component is provided by the Telegram Bot API and is used to receive updates from Telegram

Redis Database: Redis is used to store the number of times each keyword has been mentioned.

Message Handlers: These are the functions that are executed when the chatbot receives a message or command from a user.

Logging: The logging module is used to log information about the status of the bot and the incoming and outgoing messages.

Handlers: defines several handlers that process user messages in different ways. For example, `add` handler increments the count of a specific keyword that the user has sent.

2. **Explain how do your chatbot handle the special command. You need to trace the code and explain that.**

Ans: The chatbot handles special commands using `CommandHandler` instances. When a user sends a command starting with "/", the command handler will invoke the corresponding function to process the command.

For example, the command `/add` is handled by the `add` function, which takes two arguments, `update` and `context`. The `update` argument contains information about the user and the message, while the `context` argument provides access to the bot's functionality.

The `help_command` function is similar, in that it sends a message to the user when the `/help` command is received.

3. **Update your code so that when user type /hello Kevin , it will reply Good day, Kevin! . Writedown the change you have made**

```
def help_command(update: Update, context: CallbackContext) -> None:
    """Send a message when the command /help or /helloKevin is issued."""
    if update.message.text == '/helloKevin':
        update.message.reply_text('Good day, Kevin!')
    else:
        update.message.reply_text('Good to see you.')
```

yl luo
/helloKevin

C

ChatGPT
Good day, Kevin!

4. **Make a few screen caps to prove that you have applied your own Redis account, used it in your chatbot, and push the code on GitHub (at least 2 commits - lab3/lab4).**

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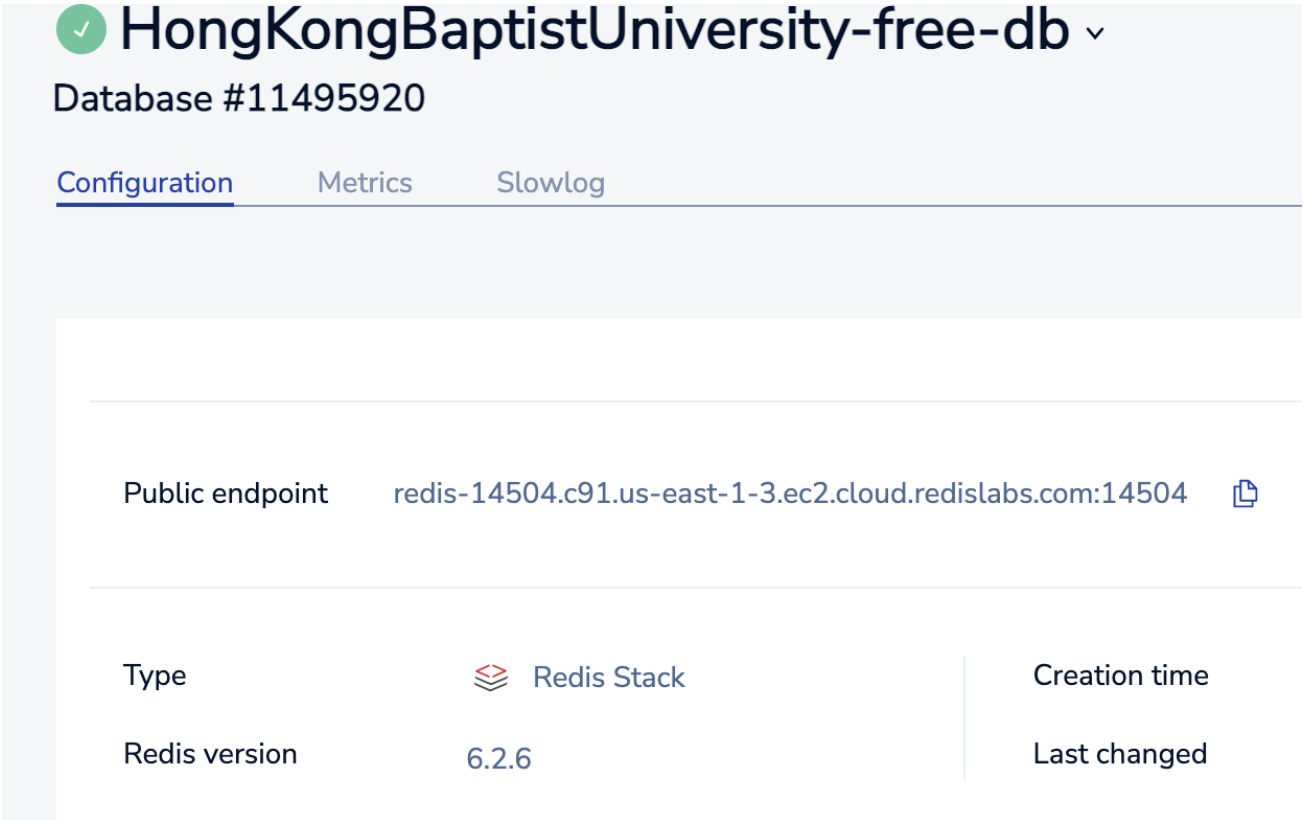

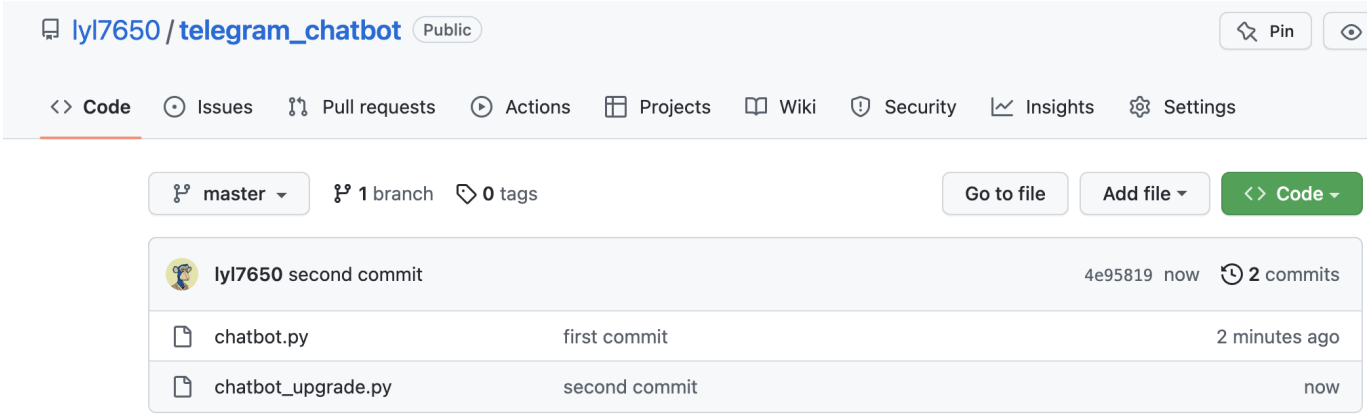

yl luo

/helloKevin

C

ChatGPT

Good day, Kevin!

yl luo

/add luoyulin

C

ChatGPT

You have said luoyulin for 1 times.

yl luo

hello

C

ChatGPT

HELLO