

Task 1 :

```
from telegram import Update
from telegram.ext import ApplicationBuilder, CommandHandler, MessageHandler, ContextTypes, filters
from llm_handler import generate_response

async def start(update: Update, context: ContextTypes.DEFAULT_TYPE):
    await context.bot.send_message(
        chat_id=update.effective_chat.id,
        text="Hello! I am a bot that can help you with your daily tasks.")

async def process(update: Update, context: ContextTypes.DEFAULT_TYPE) -> None:
    user_message = update.message.text
    print(f"Received message: {user_message}")

    await context.bot.send_message(chat_id=update.effective_chat.id, text=f"I am processing your message : {user_message}")

    llm_response = generate_response(user_message)
    assistant_tag = "<|assistant|>"
    if assistant_tag in llm_response:
        llm_response = llm_response.split(assistant_tag, 1)[1].strip()

    await context.bot.send_message(chat_id=update.effective_chat.id, text=llm_response)

def main() -> None:
    print("Hello")
    API_TOKEN = "7811652764:AAHsGZovSBazla9io-cIqZd1kgGygabclb4"

    application = ApplicationBuilder().token(API_TOKEN).build()

    application.add_handler(CommandHandler("start", start))
    application.add_handler(MessageHandler(filters.TEXT & (~filters.COMMAND), process))

    application.run_polling()

if __name__ == "__main__":
    main()
```

Task 2 :

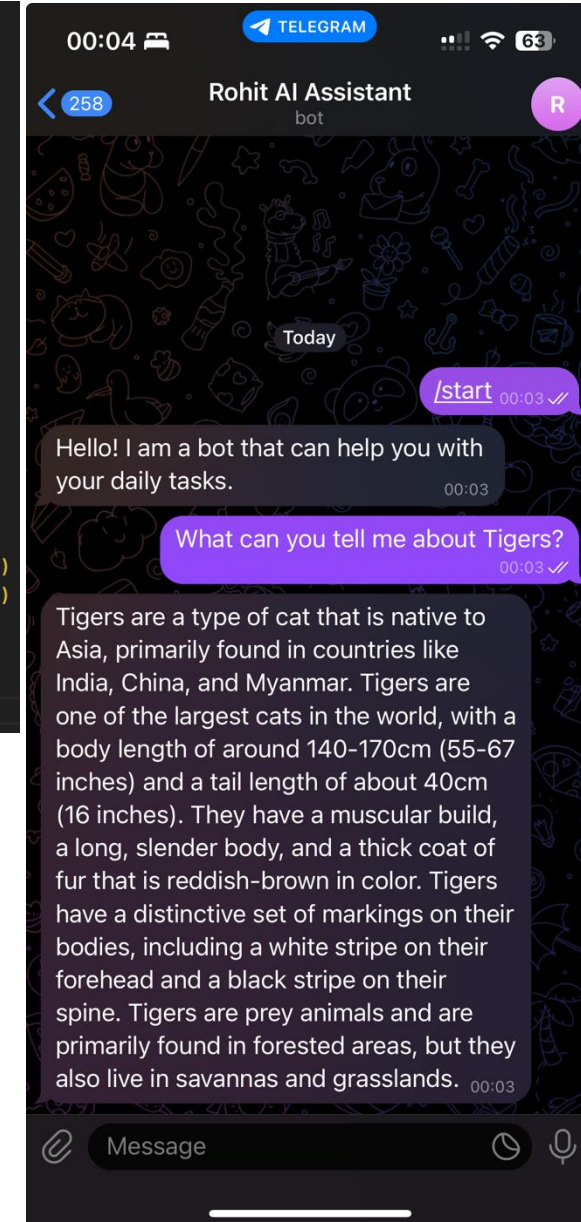
```
import torch
from transformers import pipeline

pipe = pipeline(
    "text-generation",
    model="TinyLlama/TinyLlama-1.1B-Chat-v1.0",
    torch_dtype=torch.bfloat16,
    device_map="auto"
)

def generate_response(user_message: str) -> str:
    messages = [
        {
            "role": "user",
            "content": "You are a friendly chatbot who always responds in a fun and informative way",
        },
        {"role": "user", "content": user_message},
    ]

    prompt = pipe.tokenizer.apply_chat_template(messages, tokenize=False, add_generation_prompt=True)
    outputs = pipe(prompt, max_new_tokens=256, do_sample=True, temperature=0.7, top_k=50, top_p=0.95)
    generated_text = outputs[0]["generated_text"]

    #return response
    return generated_text
```



Telegram bot link : t.me/ropo_ai_bot

Github link : https://github.com/rohitpotdukhe01/DSSS_Assignments/tree/main/HW9