

Group members:

Muhammad Izham Bin Norhamadi	B032020039
Affendy Elyas bin Azhari Sharidan	B032020024
Ahmad Sha Herizam Bin Tahir	B032020009

Lab 5 Integrate Telegram with Raspberry Pi

Task 1 Setting up the Telegram BotFather

1. Go to the telegram search bar and search for “BotFather“
2. Once the BothFather screen opens, type the command “/start“
3. To create a new bot, type the command “/newbot” into the chat
4. Save the “access token”

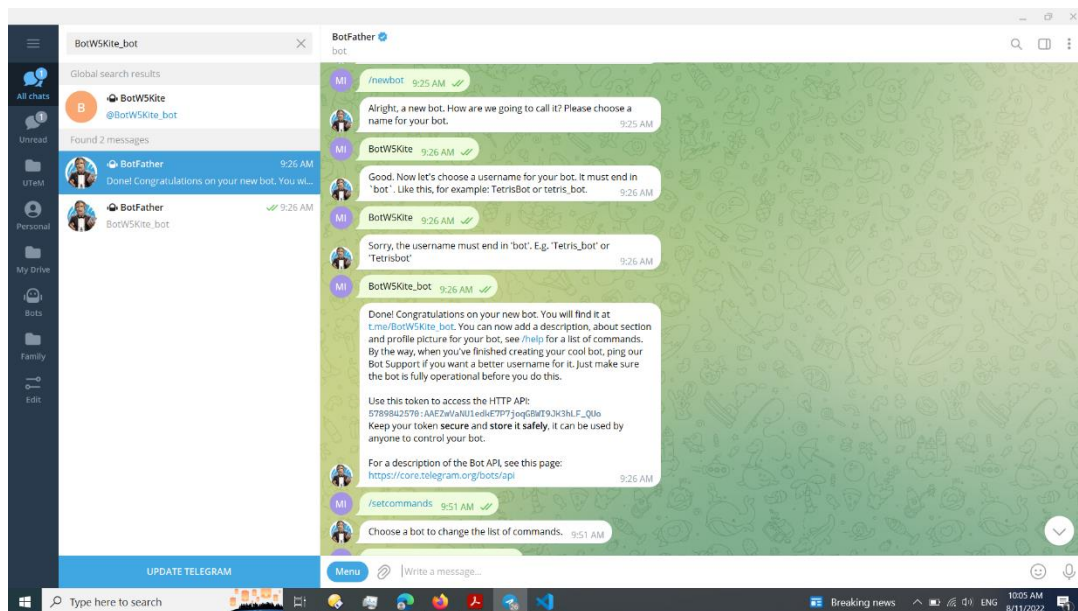


Figure 1 Creating bot with BotFather

```
File Edit Tabs Help
pi@raspberrypi:~$ sudo apt-get install python-pip
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package python-pip
pi@raspberrypi:~$ sudo pip install telepot
Downloading/unpacking telepot
  Downloading telepot-12.7.tar.gz (73kB): 73kB downloaded
  Running setup.py (path:/tmp/pip-build-CChscV/telepot/setup.py) egg_info for package telepot

Requirement already satisfied (use --upgrade to upgrade): urllib3>=1.9.1 in /usr/lib/python2.7/dist-packages (from telepot)
Installing collected packages: telepot
  Running setup.py install for telepot

Successfully installed telepot
Cleaning up...
pi@raspberrypi:~$
```

Figure 2 Install python & telepot package

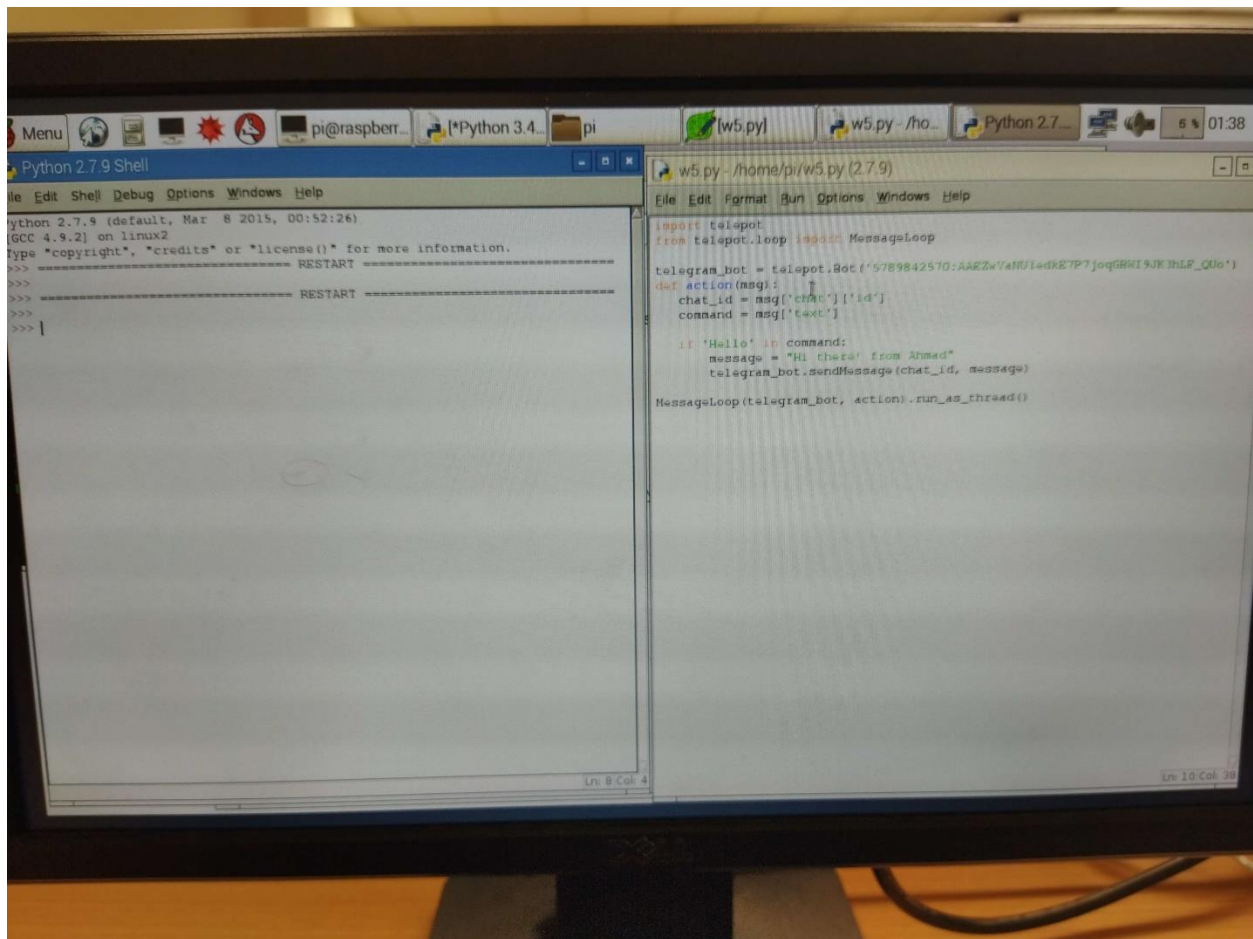


Figure 3 Running Python code

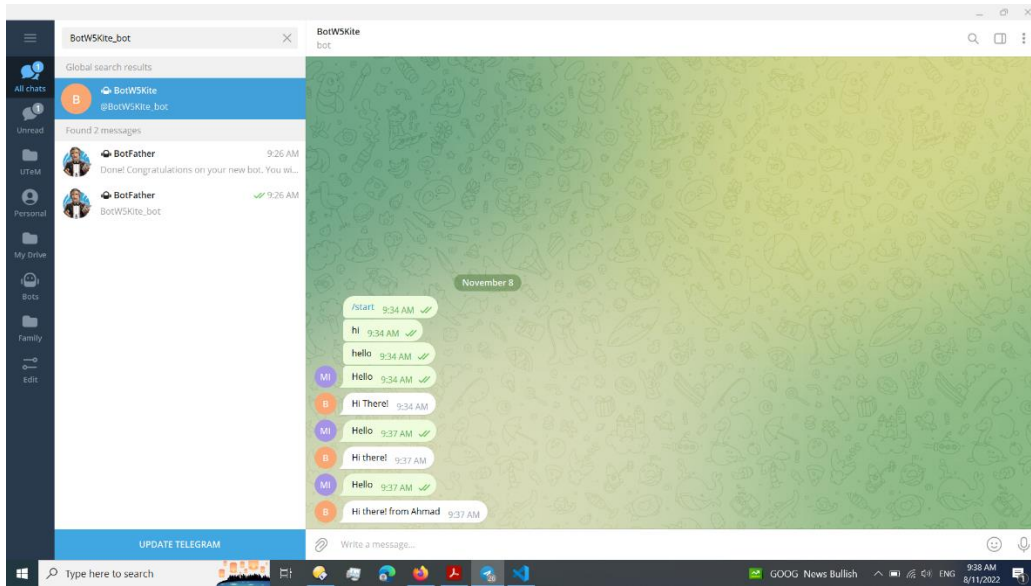


Figure 3 Testing bot

```
import telepot
from telepot.loop import MessageLoop

telegram_bot = telepot.Bot('5789842570:AAEZwVaNU1edkE7P7joqGBWI9JK3hLF')
def action(msg):
    chat_id = msg['chat']['id']
    command = msg['text']

    if 'Hello' in command:
        message = "Hi There!"
        telegram_bot.sendMessage(chat_id, message)

MessageLoop(telegram_bot, action).run_as_thread()
```

Figure 4 W5.py

Task 2 Bot Commands

No.	Command	Description
1	/newbot	create a new bot
2	/mybots	edit your bots
3	/setname	change a bot's name
4	/setdescription	change bot description
5	/setabouttext	change bot about info
6	/setuserpic	change bot profile photo
7	/setcommands	change the list of commands
8	/deletebot	delete a bot
9	/token	generate authorization token
10	/revoke	revoke bot access token
11	/setinline	toggle inline mode
12	/setinlinefeedback	change inline feedback settings
13	/setjoingroups	can your bot be added to groups?
14	/setprivacy	toggle privacy mode in groups
15	/mygames	edit your games
16	/newgame	create a new game
17	/listgames	get a list of your games
18	/editgame	edit a game
19	/deletegame	delete an existing game
20	/cancel	cancel current operation

Task 3 Discuss Security Issues with Telegram Bots

- Hackers can spread malware to other user easily because there is no anti-malware protection built into Telegram and do not face any restrictions when uploading their malicious payloads to the Discord delivery network (CDN) for file hosting.
- Telegram Bots also can be used to scam other user by pretending to sell something that can steal money and payment data.
- Telegram's bots aren't secured with encryption protocol.