

SPRINT DELIVERY 3

TEAM ID: PNT2022TMID04117

ESTABLISHING THE TEXT-TO-SPEECH SERVICE

INSTALLATION OF WATSON VERSION:

CODE:

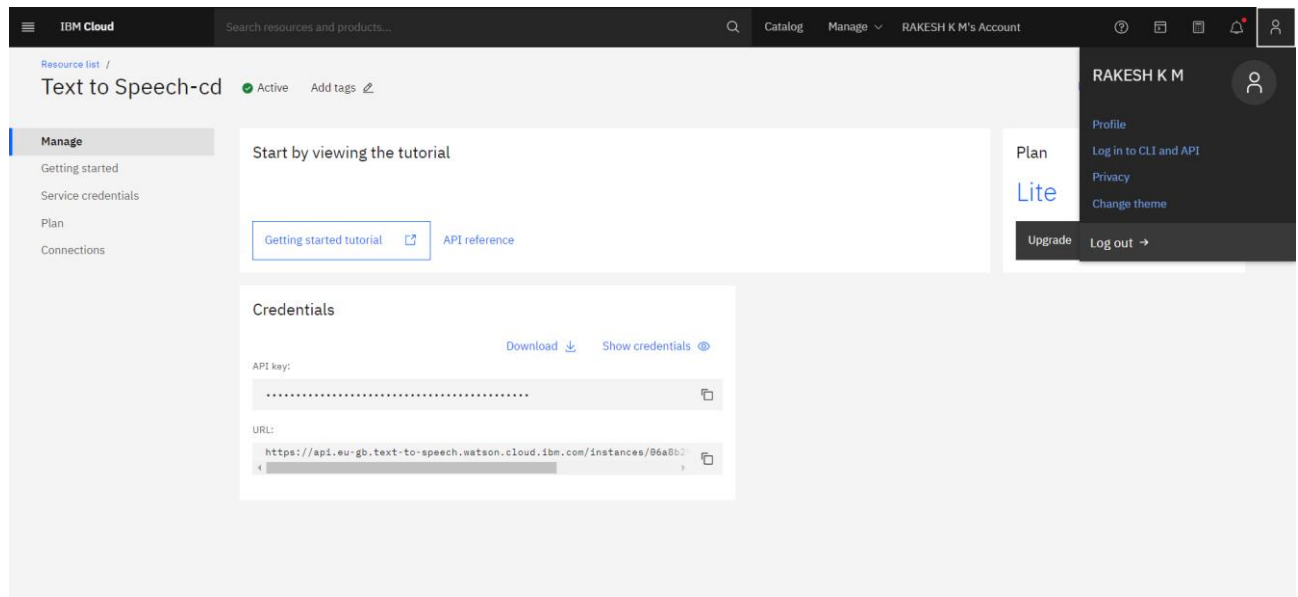
```
pip install --upgrade "ibm-watson>=6.1.0"
```

RESULT:

```
Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
(c) Microsoft Corporation. All rights reserved.

C:\Users\lavanya>pip install --upgrade "ibm-watson>=6.1.0"
Collecting ibm-watson>=6.1.0
  Downloading ibm-watson-6.1.0.tar.gz (373 kB)
    | 373 kB 273 kB/s
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting ibm-cloud-sdk-core==3.*,>=3.3.6
  Downloading ibm-cloud-sdk-core-3.16.0-py3-none-any.whl (83 kB)
    | 83 kB 394 kB/s
Collecting python-dateutil>=2.5.3
  Downloading python-dateutil-2.8.2-py2.py3-none-any.whl (247 kB)
    | 247 kB 726 kB/s
Collecting websocket-client==1.1.0
  Downloading websocket-client-1.1.0-py2.py3-none-any.whl (68 kB)
    | 68 kB 620 kB/s
Collecting requests<3.0,>=2.0
  Downloading requests-2.28.1-py3-none-any.whl (62 kB)
    | 62 kB 340 kB/s
Collecting PyJWT<3.0.0,>=2.4.0
  Downloading PyJWT-2.6.0-py3-none-any.whl (20 kB)
Collecting urllib3<2.0.0,>=1.26.0
  Downloading urllib3-1.26.12-py2.py3-none-any.whl (140 kB)
    | 140 kB 467 kB/s
Collecting six>=1.5
  Using cached six-1.16.0-py2.py3-none-any.whl (11 kB)
Collecting charset-normalizer<3,>=2
  Downloading charset-normalizer-2.1.1-py3-none-any.whl (39 kB)
Collecting idna<4,>=2.5
  Downloading idna-3.4-py3-none-any.whl (61 kB)
    | 61 kB 770 kB/s
Collecting certifi>=2017.4.17
  Downloading certifi-2022.9.24-py3-none-any.whl (161 kB)
    | 161 kB 819 kB/s
Building wheels for collected packages: ibm-watson
  Building wheel for ibm-watson (pyproject.toml) ... done
  Created wheel for ibm-watson: filename=ibm_watson-6.1.0-py3-none-any.whl size=370809 sha256=305006627ee0b9ea8dee55bbb0ced8e6023705145f876dc1f32f8dc083016bf3
  Stored in directory: c:\users\lavanya\appdata\local\pip\cache\wheels\80\69\3\3e30b078dc358148c52edb76dfa50ab1450f44f440306a8069
Successfully built ibm-watson
Installing collected packages: urllib3, six, idna, charset-normalizer, certifi, requests, python-dateutil, PyJWT, websocket-client, ibm-cloud-sdk-core, ibm-watson
Successfully installed PyJWT-2.6.0 certifi-2022.9.24 charset-normalizer-2.1.1 ibm-cloud-sdk-core-3.16.0 ibm-watson-6.1.0 idna-3.4 python-dateutil-2.8.2 requests-2.28.1 six-1.16.0 urllib3-1.26.12 websocket-client-1.1.0
WARNING: You are using pip version 21.3.1; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\lavanya\appdata\local\programs\python\python37\python.exe -m pip install --upgrade pip' command.
```

COPYING CREDENTIALS FOR API AND URL:



PROGRAM FOR ACCESSING APIs OF TTS SERVICE:

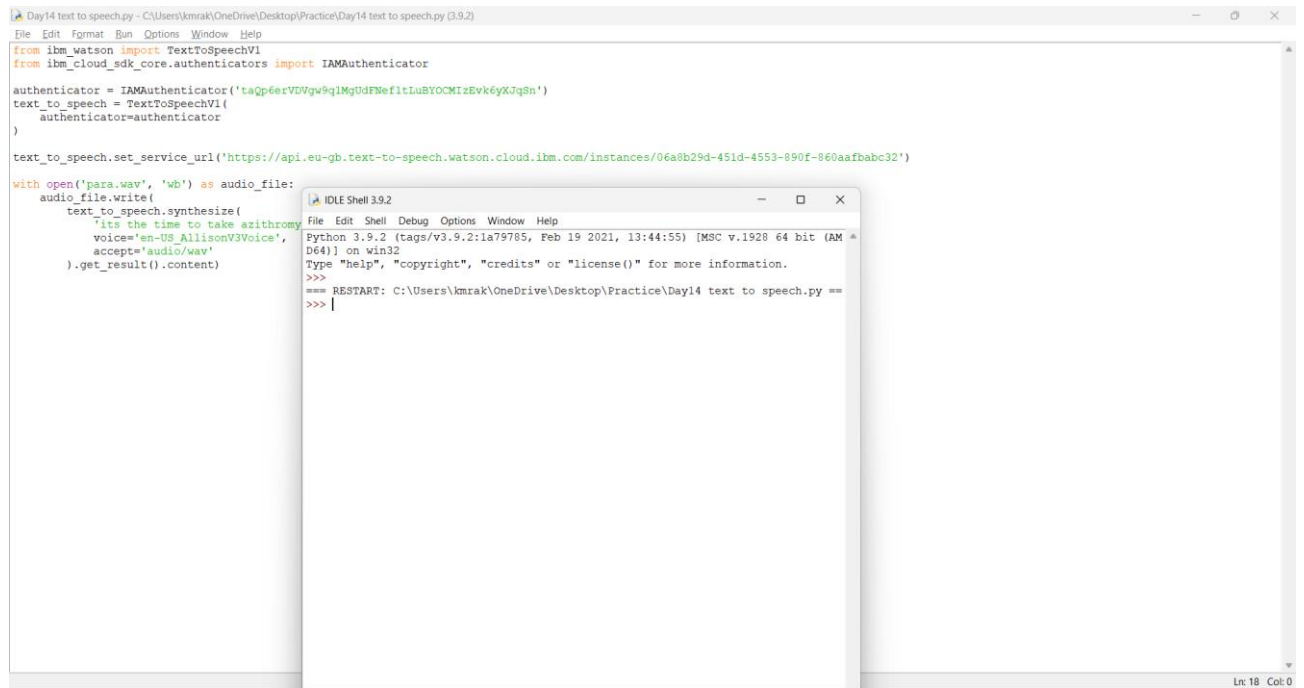
```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator

authenticator =
IAMAuthenticator('taQp6erVDVgw9q1MgUdFNef1tLuBYOCMIzEvk6yXJqSn')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)

text_to_speech.set_service_url('https://api.eu-gb.text-to-
speech.watson.cloud.ibm.com/instances/06a8b29d-451d-4553-890f-860aafbabc32')

with open('para.wav', 'wb') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'its the time to take azithromycin now',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content)
```

EXECUTION AND RUN:



The image shows a Python script in an IDE window titled "Day14 text to speech.py" and its execution in a terminal window titled "IDLE Shell 3.9.2".

Python Script (Day14 text to speech.py):

```
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator

authenticator = IAMAuthenticator('taQp6erVDVgw9q1MgUdFWfl1tLuBYOCMIzEYk6yXJqSn')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)

text_to_speech.set_service_url('https://api.eu-gb.text-to-speech.watson.cloud.ibm.com/instances/06a8b29d-451d-4553-890f-860aafabc32')

with open('para.wav', 'wb') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'its the time to take azithromy',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content
    )
```

Terminal Output (IDLE Shell 3.9.2):

```
Python 3.9.2 (tags/v3.9.2:1a79785, Feb 19 2021, 13:44:55) [MSC v.1928 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:\Users\kmrak\OneDrive\Desktop\Practice\Day14 text to speech.py ===
>>> |
```

The terminal output shows the Python interpreter starting, displaying version information, and then the script being executed. The prompt "=== RESTART: C:\Users\kmrak\OneDrive\Desktop\Practice\Day14 text to speech.py ===" indicates that the script was run from the command line. The final prompt ">>> |" shows the script has finished execution.