

<b>Sprint 4</b>	<b>Converting data received from cloud as voice using IBM Text to Speech service</b>
<b>Team ID</b>	<b>PNT2022TMID49881</b>
<b>Project Name</b>	<b>Project–Personal Assistance for Seniors Who Are Self-Reliant</b>

## INSTALLATION OF WATSON

### VERSION - Code :

Pip install – upgrade “ ibm – Watson >=6.1.0”

### Result :

```

Command Prompt
Microsoft Windows [Version 10.0.19044.2130]
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C:\Users\sibis>pip install --upgrade "ibm-watson>=6.1.0"
Requirement already satisfied: ibm-watson>=6.1.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (6.1.0)
Requirement already satisfied: ibm-cloud-sdk-core==3.*,>=3.3.6 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (3.16.0)
Requirement already satisfied: requests<3.0,>=2.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (2.28.1)
Requirement already satisfied: python-dateutil>=2.5.3 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (2.8.2)
Requirement already satisfied: websocket-client==1.1.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-watson>=6.1.0) (1.1.0)
Requirement already satisfied: PyJWT<3.0.0,>=2.4.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (2.6.0)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from ibm-cloud-sdk-core==3.*,>=3.3.6->ibm-watson>=6.1.0) (1.26.12)
Requirement already satisfied: six>=1.5 in c:\users\sibis\appdata\roaming\python\python39\site-packages (from python-dateutil>=2.5.3->ibm-watson>=6.1.0) (1.16.0)
Requirement already satisfied: idna<4,>=2.5 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (3.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2022.9.24)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\sibis\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.0->ibm-watson>=6.1.0) (2.1.1)

C:\Users\sibis>

```

## 1) COPYING CREDENTIALS FOR A PIAND URL :

The screenshot displays the IBM Cloud console interface for the 'Text to Speech-y1' service. The page is titled 'Text to Speech-y1' and includes a status indicator 'Active' and an 'Add tags' button. A left sidebar contains navigation links: 'Manage', 'Getting started', 'Service credentials', 'Plan', and 'Connections'. The main content area is divided into two sections. The top section, 'Start by viewing the tutorial', contains buttons for 'Getting started tutorial' and 'API reference'. The bottom section, 'Credentials', shows the 'API key' field with a 'Download' button and a 'Show credentials' link. Below this, the 'URL' field displays the endpoint: `https://api.au-syd.text-to-speech.watson.cloud.ibm.com/instances/94ad093b-7759-42db-act12-05d8e916af94%3A%3A?panel=manage`. A right sidebar shows the 'Plan' section with a 'Lite' plan selected and an 'Upgrade' button. The bottom of the image shows a Windows taskbar with the search bar, application icons, and system tray information indicating 34°C Cloudy and 9:36 AM on 11/18/2022.

## **2)PROGRAM FOR ACCESSING APIs OF TTS SERVICE :**

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

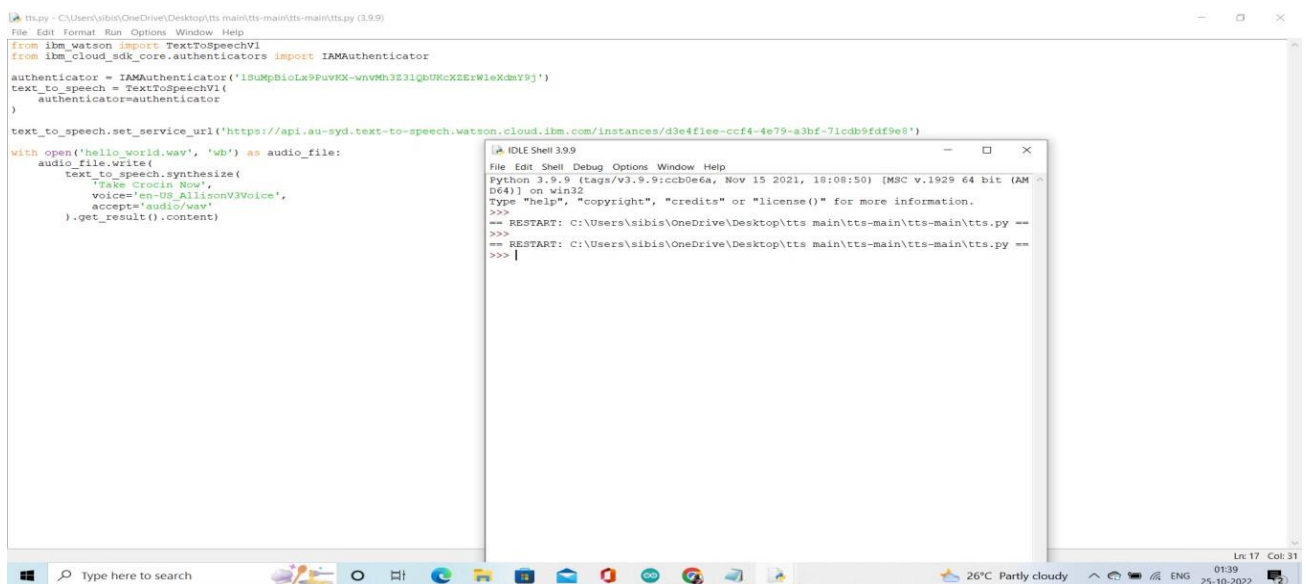
authenticator = IAMAuthenticator('1SuMpBioLx9PuvKX-
wnvMh3Z3lQbUKcXZErWleXdmY9j')

text_to_speech =
    TextToSpeechV1(authenticator=
        authenticator
    )

text_to_speech.set_service_url('https://api.au-syd.text-to-
speech.watson.cloud.ibm.com/instances/d3e4f1ee-ccf4-4e79-a3bf-71cdb9df9e8')

with open('hello_world.wav', 'wb') as
    audio_file: audio_file.write(
        text_to_speech.synthesize(
            'Take Crocin Now',
            voice='en-
            US_AllisonV3Voice', accept='audio/wav'
        ).get_result().content)
```

## Execution and Run :



```
ttts.py - C:\Users\sibis\OneDrive\Desktop\tts main\tts-main\tts-main\tts.py (3.9.9)
File Edit Format Run Options Window Help
from ibm_watson import TextToSpeechV1
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator

authenticator = IAMAuthenticator('18uMpB1oLx9PuV9X-wnV9h3E31Qb0KcXEEzW1eXdY9j')
text_to_speech = TextToSpeechV1(
    authenticator=authenticator
)

text_to_speech.set_service_url('https://api.au-syd.text-to-speech.watson.cloud.ibm.com/instances/d3e4f1ee-ccf4-4e79-a3bf-71cdb9fd9e8')

with open('hello world.wav', 'wb') as audio_file:
    audio_file.write(
        text_to_speech.synthesize(
            'Take Care of you Now',
            voice='en-US_AllisonV3Voice',
            accept='audio/wav'
        ).get_result().content
    )
```

```
IDLE Shell 3.9.9
File Edit Shell Debug Options Window Help
Python 3.9.9 (tags/v3.9.9:ccb0e6a, Nov 15 2021, 18:08:50) [MSC v.1929 64 bit (AMD64)] on win32
Type "help()", "copyright()", "credits()" or "license()" for more information.
>>>
== RESTART: C:\Users\sibis\OneDrive\Desktop\tts main\tts-main\tts-main\tts.py ==
>>>
== RESTART: C:\Users\sibis\OneDrive\Desktop\tts main\tts-main\tts-main\tts.py ==
>>> |
```

Ln 17 Col 31

26°C Partly cloudy 01:39 25-10-2022