

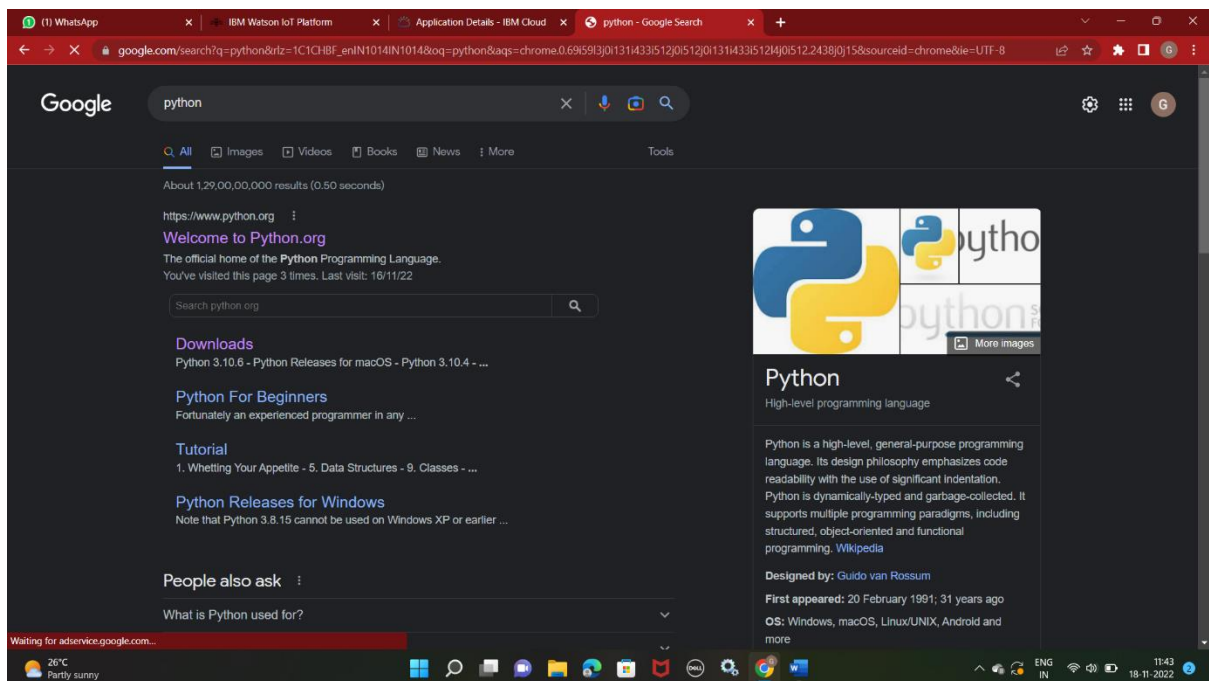
Python Software

Team ID : PNT2022TMID06917.

Project Name : Real time river water quality monitoring and Control System

Team Members:

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For more information visit the Python Developer's Guide.

Python version	Maintenance status	First released	End of support	Release schedule
3.11	bugfix	2022-10-24	2027-10	PEP 664
3.10	bugfix	2021-10-04	2026-10	PEP 619
3.9	security	2020-10-05	2025-10	PEP 596
3.8	security	2019-10-14	2024-10	PEP 569
3.7	security	2018-06-27	2023-06-27	PEP 537

Looking for a specific release?

Python releases by version number:

Release version	Release date	Click for more
Python 3.7.5	Oct. 15, 2019	Download Release Notes
Python 3.8.0	Oct. 14, 2019	Download Release Notes
Python 3.7.4	July 8, 2019	Download Release Notes
Python 3.6.9	July 2, 2019	Download Release Notes
Python 3.7.3	March 25, 2019	Download Release Notes
Python 3.4.10	March 18, 2019	Download Release Notes
Python 3.5.7	March 18, 2019	Download Release Notes

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Python 3.7.4

Release Date: July 8, 2019

Note: The release you are looking at is **Python 3.7.4**, a **bugfix release** for the legacy 3.7 series which is now in the **security fix** phase of its life cycle. See the [downloads](#) page for currently supported versions of Python and for the most recent source-only **security fix** release for 3.7. The final **bugfix release** with binary installers for 3.7 was [3.7.9](#).

Among the major new features in Python 3.7 are:

- [PEP 539](#), new C API for thread-local storage
- [PEP 545](#), Python documentation translations
- New documentation translations: [Japanese](#), [French](#), and [Korean](#).
- [PEP 552](#), Deterministic `pyc` files
- [PEP 553](#), Built-in `breakpoint()`
- [PEP 557](#), Data Classes
- [PEP 560](#), Core support for typing module and generic types

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python.org/downloads/release/python-374/

Files

Version	Operating System	Description	MD5 Sum	File Size	GP
Zipped source tarball	Source release		68111671e5b2db4ae7b9ab01bf0f9be	23017663	SIG
XZ compressed source tarball	Source release		d33e4aae66097051c2eca45ee3604803	17131432	SIG
macOS 64-bit/32-bit installer	macOS	for Mac OS X 10.6 and later	6428b4fa7583daff1a442c8a8ee08e6	34898416	SIG
macOS 64-bit installer	macOS	for OS X 10.9 and later	5dd605c38217a45773bf5e4a936b241f	28082845	SIG
Windows help file	Windows		d63999573a2c06b2ac56cade0b47cd2	8131761	SIG
Windows x86-64 embeddable zip file	Windows	for AMD64/EM64T/x64	9b00c8f6d9ec0b9abe83184a0729a2	7504391	SIG
Windows x86-64 executable installer	Windows	for AMD64/EM64T/x64	a702b4b0ad76debd3043a583e563400	26680368	SIG
Windows x86-64 web-based installer	Windows	for AMD64/EM64T/x64	28cb1c608bbd73ae8e53a3bd351b4bd2	1362904	SIG
Windows x86 embeddable zip file	Windows		9fab3b81f8841879fda94133574139d8	6741626	SIG
Windows x86 executable installer	Windows		33cc602942a54446a3d6451476394789	25663848	SIG
Windows x86 web-based installer	Windows		1b670cfa5d317df82c30983ea371d97c	1324608	SIG

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```
File Edit Format Run Options Window Help
if status == 'lighton':
    print("LIGHT ON")
elif status == 'lightoff':
    print("LIGHT OFF")
else:
    print ("please send proper command")

try:
    deviceOptions = {"org": organization,
                    "auth-token": authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)
    # .....

except Exception as e:
    print("Caught exception connecting device")
    sys.exit()

deviceCli.connect()

while True:
    pH = random.randint(0,100)
    conductivity = random.randint(0,100)
    T = random.randint(0,100)
    oxygen = random.randint(0,100)
    turbidity = random.randint(0,100)
    # Send Temperature & Humidity to IBM Watson
    data = {'T': T, 'pH': pH, 'conductivity': conductivity}

    # print data
    def myOnPublishCallback():
        print("Published data",data, "to IBM Watson")

    success = deviceCli.publishEvent("event",data,myOnPublishCallback)
    if not success:
        print("Not connected to IoTF")
    time.sleep(5)

    deviceCli.commandCallback = myCommandCallback

# Disconnect the device and application from IBM Watson
```

```
*Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 20:34:20) [MSC.v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:\Users\Toshiba\Documents\vishnu\ibm2.py =====
2022-11-16 22:30:51.089 ibmiotf.device.Client INFO Connected successfully: d:\ngatly\NodeMCU:501238
Published data {'T': 23, 'pH': 85, 'conductivity': 37, 'oxygen': 41, 'turbidity': 2} to IBM Watson
Published data {'T': 39, 'pH': 87, 'conductivity': 1, 'oxygen': 32, 'turbidity': 84} to IBM Watson
Published data {'T': 90, 'pH': 89, 'conductivity': 29, 'oxygen': 65, 'turbidity': 93} to IBM Watson
Published data {'T': 91, 'pH': 15, 'conductivity': 0, 'oxygen': 27, 'turbidity': 60} to IBM Watson
Published data {'T': 52, 'pH': 65, 'conductivity': 59, 'oxygen': 78, 'turbidity': 23} to IBM Watson
Published data {'T': 96, 'pH': 96, 'conductivity': 20, 'oxygen': 47, 'turbidity': 90} to IBM Watson
Published data {'T': 87, 'pH': 73, 'conductivity': 92, 'oxygen': 41, 'turbidity': 85} to IBM Watson
Published data {'T': 90, 'pH': 21, 'conductivity': 81, 'oxygen': 83, 'turbidity': 61} to IBM Watson
```