

GOOGLE SHEET

1. Prerequisites

Install the required packages:

```
pip install gspread oauth2client
```

2. Setup Google Cloud Project & Credentials

1. Go to [Google Cloud Console](#).
2. Create a new project (name it anything you want).
3. Enable these two APIs:
 - **Google Sheets API**
 - **Google Drive API**
4. Go to **APIs & Services** → **Credentials**.
5. Click "**Create Credentials**" → "**Service Account**".
6. Create a JSON key. Download and rename it as:
client_secret.json
(save it in the same directory as your script)

```
import gspread
from oauth2client.service_account import
ServiceAccountCredentials

# Define the scope
SCOPES = [
    'https://www.googleapis.com/auth/spreadsheets',
    'https://www.googleapis.com/auth/drive'
]

# Load credentials from JSON keyfile
credentials =
ServiceAccountCredentials.from_json_keyfile_name(
    'client_secret.json',
    SCOPES
)

# Authorize client
client = gspread.authorize(credentials)

# Replace with your actual Google Sheet ID (the long
string in the URL)
SAMPLE_SPREADSHEET_ID = 'YOUR_SPREADSHEET_ID_HERE'

# Open the spreadsheet
google_sheet =
client.open_by_key(SAMPLE_SPREADSHEET_ID)

# Select the first sheet
sheet = google_sheet.get_worksheet(0)

# Sample data to append (list format)
data_to_append = [1, 2, 3, 4, 5, 6]

# Append the row to the sheet
sheet.append_row(data_to_append)
```

```
print("✅ Data appended successfully!")
```

🧠 Tips

- **Spreadsheet ID:** It's the long string between `/d/` and `/edit` in your Google Sheet URL.
Example:

```
https://docs.google.com/spreadsheets/d/1w8jLZabcd  
efg12345678XYZ/edit#gid=0
```

- **Permissions:** Make sure your service account email (from the JSON file) is added as an **editor** to your Google Sheet (share it via the “Share” button in the sheet UI).

🌟 Common Errors & Fixes

Error	Fix
<code>gsread.exceptions.APIError:</code> <code>... 403</code>	Your Google Sheet isn't shared with the service account email.
<code>FileNotFoundError:</code> <code>client_secret.json</code>	Make sure the JSON file exists and is in the script folder.

```
AttributeError: module  
'oauth2client' has no  
attribute 'service_account'
```

You may have an outdated
version of `oauth2client`.
Reinstall it.