1 ☐ Utilities and Automation

1. **All_links_from_given_webpage** – Scrapes all links from a webpage.
2. **Ascii_art** – Converts text or images into ASCII art.
3. **Battery_notification** – Monitors battery levels and sends notifications when the battery is low.
4. **Billing_system** – A simple system to manage billing and transactions.
5. **birthDateToCurrentAge.py** – Calculates the age from a given birth date.
6. **Captcha_Generator** – Creates CAPTCHA images for user verification.
7. **capture_screenshot** – Takes screenshots of the current screen or a specific area.
8. **Capture_Video_Frames** – Captures frames from a video file for analysis.
9. **cat_command** – Implements the `cat` command in the terminal for displaying file contents.
10. **Check_website_connectivity** – Checks if a website is reachable over the internet.
11. **cli_proxy_tester** – Tests proxy servers for validity and speed.
12. **Cli_todo** – A terminal-based to-do list manager.
13. **Countdown_timer** – Implements a countdown timer with customizable time.
14. **Create_a_script_to_encrypt_files_and_folder** – A script to securely encrypt files and directories.
15. **Create_a_simple_stopwatch** – A simple stopwatch app using Python.
16. **Create_calculator_app** – Builds a basic calculator app with a GUI.
17. **Currency_converter** – Converts one currency to another based on exchange rates.
18. **Decimal_to_binary_convertor_and_vice_versa** – Converts decimal numbers to binary and vice-versa.

2 ☐ Data Handling and Conversion

1. **Convert pdf to text** – Extracts text from PDF files.
2. **Convert_a_image_to_pdf** – Converts image files into PDF format.
3. **convert_dictionary_to_python_object** – Converts a dictionary to a Python object.
4. **convert_Imgs** – Converts between different image formats (JPEG, PNG, etc.).
5. **Convert_JPEG_to_PNG** – Converts JPEG images to PNG format.
6. **Convert_JSON_to_CSV** – Converts JSON data into CSV format.
7. **Convert_numbers_to_word** – Converts numbers into their word equivalents.
8. **convert_png_images_to_ico_format** – Converts PNG images into ICO format for icons.
9. **Convert_XML_To_JSON** – Converts XML data into JSON format.

3 ☐ Web Scraping & API Integration

1. **Download_images_from_website** – Scrapes and downloads images from any website.

2. **Fetch_and_store_tweets** – Fetches tweets using the Twitter API and stores them.
3. **Fetch_current_weather** – Gets current weather data for a location.
4. **Fetch_open_ports** – Scans for open ports on a network.
5. **Find_imdb_rating** – Fetches IMDb ratings for movies using the IMDb API.
6. **Geocoding** – Converts addresses into geographical coordinates using an API.
7. **Instagram_profile** – Scrapes an Instagram profile for public data.
8. **News_website_scraper** – Scrapes news websites for articles and headlines.
9. **Scrape_Hacker_News** – Scrapes Hacker News for latest stories and comments.
10. **Scrape_quotes** – Scrapes motivational quotes from a website.
11. **Scraping Medium Articles** – Scrapes articles from Medium for content.
12. **Web_scraping_a_youtube_comment** – Scrapes YouTube comments from a video.
13. **Web_page_summation** – Summarizes the content of a webpage for quick reading.
14. **Wikipedia_search_wordcloud** – Scrapes Wikipedia and generates a word cloud from the article.

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4 ☐ Game Development

1. **GUI Rock-Paper-Scissors Game** – A graphical interface for the classic Rock-Paper-Scissors game.
2. **MasterMind** – Implements the classic MasterMind puzzle game.
3. **Number_guessing_game** – A terminal-based number guessing game.
4. **Snake Game** – A simple implementation of the Snake game.
5. **Space_bullet_shooter_game** – A 2D space shooting game with bullets.
6. **Tic_tac_toe** – A simple implementation of the Tic-Tac-Toe game.
7. **Tic_tac_toe_with_ai** – Tic-Tac-Toe with AI to play against the computer.
8. **RockPaperScissors_Game** – A terminal-based Rock, Paper, Scissors game.
9. **Speed_Game** – A game that challenges the user's reaction time.

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5 ☐ Image Processing and Visualizations

1. **Dominant_color** – Extracts the most dominant color from an image.
2. **Easy_cartoonify** – Converts a regular image into a cartoon-style image.
3. **Image_watermark** – Adds watermarks to images.
4. **Reduce_image_file_size** – Compresses an image to reduce its file size.
5. **Snapshot_of_given_website** – Takes a screenshot of a given website.

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6 ☐ Networking and System Tools

1. **Dns_record** – Fetches DNS records for a domain.
2. **Find_out_hostname_and_ip_address** – Finds the hostname and IP address of the local machine or a given domain.

3. **Internet_connection_check** – Checks if the system has an active internet connection.
4. **Get_meta_information_of_images** – Extracts metadata from image files (e.g., EXIF).
5. **Get_wifi_password** – Retrieves saved Wi-Fi passwords from the system.
6. **Fetch_HTTP_status_code** – Fetches the HTTP status code of a URL.
7. **Wifi_windows_password_displayer** – Displays saved Wi-Fi passwords on Windows.
8. **Website_blocker** – Blocks specific websites for productivity.
9. **cli_proxy_tester** – Tests proxy configurations through the terminal.
10. **S3_File_Upload** – Uploads files to an AWS S3 bucket.
11. **Terminal_Based_Hangman_Game** – A terminal-based version of the Hangman game.

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7 ☐ Security and Encryption

1. **Encrypt_and_decrypt_text** – Encrypts and decrypts text messages.
2. **Hashing_passwords** – Hashes passwords for secure storage.
3. **Create_a_script_to_encrypt_files_and_folder** – Encrypts files and folders to secure sensitive data.
4. **steganography** – Hides secret messages inside images (image-based encryption).
5. **Recursive_password_generator** – A password generator that recursively creates secure passwords.

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8 ☐ Miscellaneous & Fun

1. **Random_password_generator** – Generates random secure passwords.
2. **Random_Wikipedia_Article** – Fetches a random article from Wikipedia.
3. **Random_word_from_list** – Selects a random word from a list.
4. **Write_a_script_to_download_a_random_image_from_unsplash_and_set_it_as_wallpaper** – Downloads a random image from Unsplash and sets it as a wallpaper.
5. **Plagiarism_checker** – Checks for plagiarism in text or articles.
6. **Speaking_Dictionary** – A dictionary that speaks the word and its meaning.
7. **Text_to_morse_code** – Converts text to Morse code.
8. **Text_to_speech** – Converts text into speech using text-to-speech technology.
9. **XKCD_downloader** – Downloads XKCD comic strips.

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9 ☐ Miscellaneous Tools and Scripts

1. **Sine_Wave** – Generates a sine wave pattern in a graph.
2. **Spell_checker** – Checks and corrects spelling errors in text.
3. **Split_a_video_file_by_given_time_period** – Splits a video file into multiple segments based on time.
4. **Split_File** – Splits a file into multiple smaller parts.

5. **Split_folder_into_subfolders** – Organizes files into subfolders based on criteria.
6. **Store_emails_in_csv** – Stores email addresses in a CSV file for bulk emailing.
7. **Textfile_analysis** – Analyzes a text file for word frequency, character count, etc.
8. **Write_script_to_compress_folder_and_files** – Compresses a folder or files into a zip format.
9. **Write_script_to_move_files_into_alphabetically_ordered_folder** – Sorts and organizes files into alphabetically ordered folders.

Final Thoughts:

This collection of **Python projects** offers a wide array of opportunities for both learning and practical application. Whether you're a beginner looking to solidify your programming fundamentals, or an experienced developer looking to expand your portfolio, these projects cover a range of areas that will help you hone your skills.

From **automation and utilities** to **game development** and **image processing**, each project can serve as a stepping stone to mastering various aspects of Python. They not only teach core concepts like loops, functions, and libraries but also allow you to experiment with external APIs, develop creative applications, and solve real-world problems.

Security, data handling, and web scraping projects will help you stay relevant in today's tech landscape, especially with the rise of AI, data analysis, and automation. Games and visualizations allow you to have fun while developing a deep understanding of Python's graphical and interactive capabilities.

Moreover, **web scraping**, **networking**, and **system tools** can lead to practical applications that can save time and increase productivity, while also introducing you to new libraries and frameworks.

These projects are perfect for **showcasing** your skills in portfolios, for **creating useful tools** that improve your daily life, or for **prototyping ideas** that might evolve into larger applications.

Key Benefits:

- **Skill Development**: Gain proficiency in Python's diverse libraries and frameworks.
- **Portfolio Enhancement**: A well-rounded portfolio with real-world projects can make you stand out in job markets.
- **Problem Solving**: These projects challenge you to think critically and apply Python to solve real-life problems.
- **Fun & Creativity**: Work on projects that excite you, from games to automation scripts, and unleash your creativity.

Whether you're starting out or refining your Python skills, this bundle is a fantastic way to **learn by doing** and build **functional applications** that can be showcased to others or used personally.

COMPLETE LIST OF PROJECT IN THE BUNDLE

All_links_from_given_webpage
Ascii_art
AudioBook
Baidu_POI_crawl
Battery_notification
Billing_system
birthDateToCurrentAge.py
Bouncing_ball_simulator
Calculate_age
Captcha_Genrator
capture_screenshot
Capture_Video_Frames
cat_command
chatbot
Check_website_connectivity
cli_proxy_tester
Cli_todo
Compute_IoU
convert pdf to text
Convert_a_image_to_pdf
convert_dictionary_to_python_object
convert_Imgs
Convert_JPEG_to_PNG
Convert_JSON_to_CSV
Convert_numbers_to_word
convert_png_images_to_ico_format
Convert_XML_To_JSON
Countdown_timer
Create_a_script_to_encrypt_files_and_folder
Create_a_simple_stopwatch
Create_calculator_app
Currency_converter

Decimal_to_binary_convertor_and_vice_versa
detect_align_faces
Diff_Util
Digital_clock
Dns_record
Dominant_color
dork_search_google
download GeeksForGeeks articles
Download_images_from_website
Drowsiness detection
Duplicate files remover
Easy_cartoonify
EasyVideoPlayer
Encrypt_and_decrypt_text
export_mysql_to_csv_send_to_wocom
Extract_zip_files
Fetch HTTP status code
Fetch_and_store_tweets
Fetch_current_weather
Fetch_open_ports
Find_imdb_rating
Find_out_hostname_and_ip_address
Games
Geocoding
Get_meta_information_of_images
Get_wifi_password
GUI Rock-Paper-Scissors Game
Hashing_passwords
Hello
Image_watermark
Instagram_profile
Internet_connection_check

Language_translator
Leap_Year_Checker
MasterMind
Merge_csv_files
Merge_pdfs
Movie Information Scraper
Multi_language_OCR
Network Usage Tracker
News_website_scraper
Number_guessing_game
Organized_download_folder_with_different_categories
Password_generator
PDF to MP3
Plagarism_checker
Py_carbon_clips
Python_auto_draw
Qr_code_generator
racing_barchart_animation
Random_password_generator
Random_Wikipedia_Article
Random_word_from_list
Recursive_password_generator
Reduce_image_file_size
RockPaperScissors_Game
S3_File_Upload
Scrape_Hacker_News
Scrape_quotes
Scraping Medium Articles
Send_email_from_csv
Set_Alarm
Shutdown_or_restart_your_device
Sine_Wave

Snake Game
Snapshot_of_given_website
Solver_linear_equations
Space_bullet_shooter_game
Speaking_Dictionary
Speech_to_text
Speed_Game
Spell_checker
Split_a_video_file_by_given_time_period
Split_File
Split_folder_into_subfolders
steganography
Store_emails_in_csv
String_search_from_multiple_files
telegram_bot
Terminal_Based_Hangman_Game
Terminal_progress_bar_with_images_resizing
text_to_morse_code
Text_to_speech
Textfile_analysis
Tic_tac_toe
Tic_tac_toe_with_ai
Time_to_load_website
Todo_app
Unique_words_in_a_file
Unstructured Supplemenrary Service Data
Web_page_summation
Web_scraping_a_youtube_comment
Website_blocker
whatsapp_Bot
Wifi_windows_password_displayer

Wikipedia_search_wordcloud
WishList
Write_a_script_to_download_a_random_image_from_unsplash_and_set_it_as_wallpaper
Write_script_to_compress_folder_and_files
Write_script_to_move_files_into_alphabetically_ordered_folder
XKCD_downloader
Zip_Bruter