List Standard modules of python with their usage

Operating system

Provide functions to interact with the operating system.

create/delete files, check directories

Example:

```
import os

Print(os.getcwd())
```

System function

Provide access to system-related functions.
To check python version, exit program.

Example:

```
import sys
print(sys.version)  # Get Python version

sys.exit()  # Exit the program
```

Mathematical Function

Provides mathematical function

Example:

```
Import math

print(math.sqrt(4))  #Square root of 4
```

Random number generator

generate random numbers and selects random items from a list.

Example:

```
Import random

Print(random.randint(1,10,6))   # Random integers b/w 1 to 10
```

Data and time handling

Provide functions to work with dates and times.

Example:

Import datetime

Now = datetime.datetime.now()

Regular expressions

Provides functions for pattern matching and text processing

Example:

Import re

Pattern = r”\d+”

Result= re.findall(pattern, “Hello 23, hi 345”)

Print(result)

Data processing:

JSON handling

Helps to convert data to JSON format (used in web applications)

Example:

```
import json
data = {"name": "John", "age": 25}
json_string = json.dumps(data)  # Convert dictionary to JSON string
print(json_string)
```

CSV file handling

Provide functions to read and write csv files.

Example:

```
Import csv
with open(filename, 'w') as file:
    content = input("Enter the content to write into the file: ")
    file.write(content)
    print("File written successfully.")
```

File handling

Helps to copy, move, and delete files.

Example:

```
Import shutil
Stuil.copy(“source_file.txt”,”copy_file.txt”)
```