

Python - OS Module

The OS module in Python provides functions for creating and removing a directory (folder), fetching its contents, changing and identifying the current directory, etc.

You first need to import the `os` module to interact with the underlying operating system.

Getting current working directory

```
import os
a=os.getcwd()
print('dir=',a)
```

Creating a Directory

We can create a new directory using the `os.mkdir()` function

```
import os

os.mkdir('gautampythonproject')
```

A new directory corresponding to the path in the string argument of the function will be created. If you open the `D:\` drive, then you will see the `gautampythonproject` folder has been created.

By default, if you don't specify the whole path in the `mkdir()` function, it will create the specified directory in the current working directory or drive.

```
import os

os.mkdir('D:\gautampythonproject')
```

Changing the Current Working Directory

```
import os

os.mkdir("C:\gautamproject")
os.chdir('C:\gautamproject')
print(os.getcwd())
```

You can change the current working directory to a drive. The following makes the `C:\` drive as the current working directory.

```
import os

os.chdir("C:\\")

print(os.getcwd())
```

In order to set the current directory to the parent directory use `".."` as the argument in the `chdir()` function.

```
import os

os.chdir("..")
print(os.getcwd())
```

Removing a Directory

The `rmdir()` function in the OS module removes the specified directory either with an absolute or relative path. Note that, for a directory to be removed, it should be empty.

```
import os

os.rmdir('gautamproject')

print(os.getcwd())
```