

OS module in python

The OS module in python provides functions for interacting with the operating system. OS, comes under Python's standard utility modules.

1

```
import os
print(os.name)
```

2

```
import os
print(os.getcwd())
# To print absolute path on your system
# os.path.abspath('.')

# To print files and directories in the current directory
# on your system
# os.listdir('.')

3
```

3

```
import os
try:
    # If the file does not exist,
    # then it would throw an IOError
    filename = 'GFG.txt'
    f = open(filename, 'rU')
    text = f.read()
    f.close()

    # Control jumps directly to here if
    # any of the above lines throws IOError.
except IOError:

    # print(os.error) will <class 'OSError'>
    print('Problem reading: ' + filename)

# In any case, the code then continues with
# the line after the try/except
```

File object manipulation

4

```
import os
fd = "GFG.txt"
```

```
# popen() is similar to open()
file = open(fd, 'w')
file.write("Hello")
file.close()
file = open(fd, 'r')
text = file.read()
print(text)
```

```
# popen() provides a pipe/gateway and accesses the file directly
file = os.popen(fd, 'w')
file.write("Hello")
# File not closed, shown in next function.
```

```
5
import os
fd = "GFG.txt"
file = open(fd, 'r')
text = file.read()
print(text)
os.close(file)
```

```
6
import os
fd = "GFG.txt"
os.rename(fd, 'New.txt')
os.rename(fd, 'New.txt')
```

Analysis the code and explain

```
1
class Person(object):

    def __init__(self, name):
        self.name = name

    def getName(self):
        return self.name

    def isEmployee(self):
        return False
```

```
class Employee(Person):

    def isEmployee(self):
        return True

emp = Person("nerd1") # An Object of Person
print(emp.getName(), emp.isEmployee())

emp = Employee("nerd2") # An Object of Employee
print(emp.getName(), emp.isEmployee())
```

2

```
class MyClass:

    __hiddenVariable = 0

    def add(self, increment):
        self.__hiddenVariable += increment
        print (self.__hiddenVariable)
```

```
myObject = MyClass()
myObject.add(2)
myObject.add(5)
```

3

```
print (myObject.__hiddenVariable)

class MyClass:

    __hiddenVariable = 10

myObject = MyClass()
print(myObject._MyClass__hiddenVariable)
```