

## File handling and error handling

### Reading a file

```
file=open('/content/lohita.txt','r')
print(file.read())
file.close()

lohita
hihsigbxsxugs
klhiuwdbkcblo
biksuhcsuhcs
pchciduhvd
djvbdueihih

file=open('/content/lohita.txt','r')
content=file.readline()
print(content)
file.close()

hello world hello world Good morning

file=open('/content/lohita.txt','r')
content=file.readlines()
print(content)
file.close()

['hello world hello world Good morning\n', 'ug7uehfieufhyei8fhe\n',
'joioidvhoeivjio']
```

### Writing a file

```
file=open('/content/lohita.txt','w')
file.write('hello world')
file.close()
```

### Appending the file

```
file=open('/content/lohita.txt','a')
file.write('Good morning')
file.close()
```

### using with statement

```
with open('lohita.txt','r') as file:
    print(file.read())
```

```
with open('/content/download (4).jpeg','rb') as file:  
    data=file.read()
```

Error handling

```
try:  
    num=int(input('enter the number'))  
    print(10/num)  
except ZeroDivisionError:  
    print('You cannot divide by zero')  
except ValueError:  
    print('Invalid input!Please enter the number')
```

```
enter the numberlohi  
Invalid input!Please enter the number
```

finally block

```
try:  
    file=open('lohit.txt','r')  
    print(file.read())  
except FileNotFoundError:  
    print('File not found')  
finally:  
    print('execution over')
```

```
File not found  
execution over
```

Raising exception

```
def checkage(age):  
    if age<18:  
        raise ValueError('Age must be 18 or older')  
    return True  
try:  
    checkage(16)  
except ValueError as e:  
    print(e)
```

```
Age must be 18 or older
```

reading and writing a file

```
with open('/content/lohita.txt','w') as file:  
    file.write('Python is awesome')  
  
with open('/content/lohita.txt','r')as file:  
    print(file.read())
```

Python is awesome

handling zero division error

```
try:
    num1=int(input('enter the first number'))
    num2=int(input('enter the second number'))
    result=num1/num2
    print('Result',result)
except ZeroDivisionError:
    print('you cannot divide by zero')
except ValueError:
    print('invalid input!please enter a number')

enter the first number8
enter the second number0
you cannot divide by zero
```

custom exception

```
class NegativeNumberError(Exception):
    pass
def checkpositive(num):
    if number<0:
        raise NegativeNumberError('Negative number is entered')
try:
    number=int(input('enter the number'))
    checkpositive(number)
    print('you entered positive number')
except NegativeNumberError as e:
    print(e)

enter the number-8
Negative number is entered
```

create and write

```
file=open('/content/data.txt','w')
file.write('hello world')
file.close()
```

read a file

```
file=open('/content/data.txt','r')
content=file.read()
print(content)
file.close()

hello world
```

append to file

```
file=open('/content/data.txt','a')
file.write('welcome to python Programming')
file.close()

import random
randomnumber=random.randint(1,6)
print('the random number is:',randomnumber)

the random number is: 5
```