

▼ Exception handling

```
print("start")
x=0
result=10/x
print(result)
print("end")
```

```
start
```

```
-----
ZeroDivisionError                                Traceback (most recent call last)
<ipython-input-1-9cfd568017e6> in <module>
      1 print("start")
      2 x=0
----> 3 result=10/x
      4 print(result)
      5 print("end")
```

```
ZeroDivisionError: division by zero
```

SEARCH STACK OVERFLOW

```
#try
#except
#else
#finally
```

```
print("start")
x=0
try:
    result=10/x
    print(result)
except ZeroDivisionError:
    print("you can't divide by zero")
print("end")
```

```
start
you can't divide by zero
end
```

```
list1=[2,3,4,5]
print(list1[4])
```

```
-----
IndexError                                Traceback (most recent call last)
<ipython-input-14-3739df05b3cd> in <module>
      1 list1=[2,3,4,5]
----> 2 print(list1[4])

IndexError: list index out of range
```

SEARCH STACK OVERFLOW

```
print("start")
x=0
list1=[2,3,4,5]
try:
    result=10/x
    try:
        print(list1[4])
    except IndexError as ex:
        print(ex)
    print(result)
except ZeroDivisionError:
    print("you can't div by zero")
print("end")

start
you can't div by zero
end
```

```
print("start")
x=0
list1=[2,3,4,5]
try:
    print("this part gets executed")
    result=10/x    #after arrival of exception it directly jumps to except block without exc
    print("this part which is written after occurrence of exception, does not gets executed")
    print(list1[4])
    print(result)
except ZeroDivisionError:
    print("you can't div by zero")
except IndexError as ex:
    print(ex)
print("end")

start
this part gets executed
this part which is written after occurrence of exception, does not gets executed
list index out of range
end
```

```
print("start")
x=2
list1=[2,3,4,5]
try:
    result=10/x
    print(list1[4])
    print(result)
except Exception as ex:
    print(ex)
print("end")
```

```
start
list index out of range
end
```

```
print("start")
x=2
list1=[2,3,4,5]
try:
    result=10/x
    print(list1[4])
    print(result)
except Exception as ex:
    print(ex)
finally:
    print("finally block")
```

```
print("end")

start
list index out of range
finally block
end
```

```
print("start")
x=2
list1=[2,3,4,5]
try:
    result=10/x
    print(list1[2])
    print(result)
except Exception as ex:
    print(ex)
else:
    print("if exception does not occur and you have to display something-else block ")
finally:
    print("This will excute everytime-finally block")

print("end")
```

```
start
4
5.0
```

```
if exception does not occur and you have to display something-else block
This will excute everytime-finally block
end
```

```
print("start")
x=2
list1=[2,3,4,5]
try:
    result=10/x
    print(list1[2])
    print(result)
except Exception as ex:
    print(ex)
else:
    print("else block")
finally:
    print("finally block")

print("end")
```

```
start
4
5.0
else block
finally block
end
```