python_捕获异常

python捕获分类：

1、明确类型进行捕获

```python
d={"a":1}
try:
    d["key"]
except KeyError as e: #只能捕获keyerror这一种错误
    print('出错了')
```

```python
try:
    1/0
    d['key']
except ZeroDivisionError as e: #捕获ZeroDivisionError这一种错误
    print("error")
```

```
C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py
error
```

```python
d={"a":1}
try:   #当try中有多个错误是，根据位置在前的错误会报错走捕获，后面的错误捕获不再进行输出
    d['key']
    1/0
except ZeroDivisionError as e: #捕获ZeroDivisionError这一种错误
    print("error")
except KeyError as e: #只能捕获keyerror这一种错误
    print('出错了')
```

```
C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py
出错了   #因为keyerror的错误在前，所以程序走了其捕获异常代码，未走获ZeroDivisionError这个捕获
```

2、未明确类型进行统一捕获

```python
try:

    1/0

except KeyError as e:   #只能捕获一种错误

    print("error")
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

Traceback (most recent call last):

  File "D:/study/python/test/dd.py", line 89, in <module>

    1/0

ZeroDivisionError: division by zero

```python
try:

    1/0

except Exception as e:   #捕获任何错误

    print("error")
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

error

```python
try:

    d[9]

except Exception as e:   #捕获任何错误

    print('error')
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

error

3、捕获错误带分支逻辑

```python
try:
    a='000'
except Exception as e:   #当有错误运行这里的代码
    print('error')
else: #当没有捕获到错误就运行这里的代码
    print('无错误走这里')
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

无错误走这里

```python
try:
    a=b
except Exception as e:   #当有错误运行这里的代码
    print('有错误运行这里')
else: #当没有捕获到错误就运行这里的代码
    print('无错误走这里')
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

有错误运行这里

4、捕获带finally

```
try:

    a=b

except Exception as e:   #当有错误运行这里的代码

    print('有错误运行这里')

else: #当没有捕获到错误就运行这里的代码

    print('无错误走这里')

finally: #出错还是不出错程序都会运行这里的代码

    print('出错还是不出错我肯定是要运行的')
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

有错误运行这里

出错还是不出错我肯定是要运行的

```
try:

    a=1

except Exception as e:   #当有错误运行这里的代码

    print('有错误运行这里')

else: #当没有捕获到错误就运行这里的代码

    print('无错误走这里')

finally: #出错还是不出错程序都会运行这里的代码

    print('出错还是不出错我肯定是要运行的')
```

C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

无错误走这里

出错还是不出错我肯定是要运行的

5、异常的输出

```python
import traceback

try:
    a=a
except Exception as e:
    print(e)  #输出具体的错误内容

print('════════════════════')

try:
    a=a
except Exception as e:
    print(traceback.format_exc())  #输出详细的错误内容
```

```
C:\Users\zhaow\AppData\Local\Programs\Python\Python37\python.exe D:/study/python/test/dd.py

name 'a' is not defined

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Traceback (most recent call last):

  File "D:/study/python/test/dd.py", line 94, in <module>

    a=a

NameError: name 'a' is not defined
```