

## COMP110: Error Handling in Python

Error handling allows programs to continue running even when encountering issues.

### 1. try-except Block

try:

```
x = int("abc")
```

except ValueError:

```
print("Invalid input!")
```

### 2. Handling Multiple Exceptions

try:

```
x = 10 / 0
```

except ZeroDivisionError:

```
print("Cannot divide by zero!")
```

except ValueError:

```
print("Value error!")
```

### 3. try-except-else

try:

```
number = int("42")
```

except ValueError:

```
print("Error occurred")
```

else:

```
print("Conversion successful:", number)
```

#### 4. try-finally

file = None

try:

file = open("example.txt")

content = file.read()

finally:

if file:

file.close()

#### 5. Raising Exceptions

def set\_age(age):

if age < 0:

raise ValueError("Age cannot be negative")

print("Age set to", age)

set\_age(25) # Valid

# set\_age(-1) would raise ValueError