Modulo 10: Evidencia

```python
MisKatas > 🐍 Open.py > ...
1    def main():
2        open("/path/to/mars.jpg")
3
4    if __name__ == '__main__':
5        main()
```

Output:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    JUPYTER

C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 open.py
Traceback (most recent call last):
  File "C:\Users\raulb\OneDrive\Escritorio\MisKatas\open.py", line 5, in <module>
    main()
  File "C:\Users\raulb\OneDrive\Escritorio\MisKatas\open.py", line 2, in main
    open("/path/to/mars.jpg")
FileNotFoundError: [Errno 2] No such file or directory: '/path/to/mars.jpg'

C:\Users\raulb\OneDrive\Escritorio\MisKatas>
```

```python
MisKatas > 🐍 config.py > ...
1    def main():
2        try:
3            configuration = open('config.txt')
4        except FileNotFoundError:
5            print("Couldn't find the config.txt file!")
6
7
8    if __name__ == '__main__':
9        main()
```

Output:

```
C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 config.py
Traceback (most recent call last):
  File "C:\Users\raulb\OneDrive\Escritorio\MisKatas\config.py", line 9, in <module>
    main()
  File "C:\Users\raulb\OneDrive\Escritorio\MisKatas\config.py", line 3, in main
    configuration = open('config.txt')
PermissionError: [Errno 13] Permission denied: 'config.txt'
```

MisKatas > 🐍 config.py > ⊘ main

```python
1  def main():
2      try:
3          configuration = open('config.txt')
4      except Exception:
5          print("Couldn't find the config.txt file!")
6
7
8  if __name__ == '__main__':
9      main()
```

Output:

```
C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 config.py
Couldn't find the config.txt file!
```

MisKatas > 🐍 config.py > ⊘ main

```python
1  def main():
2      try:
3          configuration = open('config.txt')
4      except FileNotFoundError:
5          print("Couldn't find the config.txt file!")
6      except IsADirectoryError:
7          print("Found config.txt but it is a directory, couldn't read it")
8
9
10 if __name__ == '__main__':
11     main()
```

Output:

```
C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 config.py
Traceback (most recent call last):
  File "C:\Users\raulb\OneDrive\Escritorio\MisKatas\config.py", line 11, in <module>
    main()
  File "C:\Users\raulb\OneDrive\Escritorio\MisKatas\config.py", line 3, in main
    configuration = open('config.txt')
PermissionError: [Errno 13] Permission denied: 'config.txt'
```

*********No pude provocar la excepción de que Config.txt no es un directorio, ya que me marcaba
Permission denied. Para seguir el proceso, implementé handling de PermissionError:***********

```
MisKatas > config.py > main
 1  def main():
 2      try:
 3          configuration = open('config.txt')
 4      except FileNotFoundError:
 5          print("Couldn't find the config.txt file!")
 6      except PermissionError:
 7          print("Found config.txt but it has a permission issue, couldn't read it")
 8      except IsADirectoryError:
 9          print("Found config.txt but it is a directory, couldn't read it")
10
11
12  if __name__ == '__main__':
13      main()
```

Output:

```
C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 config.py
Found config.txt but it is a directory, couldn't read it

C:\Users\raulb\OneDrive\Escritorio\MisKatas>
```

Después de borrar el archivo:

```
C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 config.py
Found config.txt but it has a permission issue, couldn't read it

C:\Users\raulb\OneDrive\Escritorio\MisKatas>python3 config.py
Couldn't find the config.txt file!

C:\Users\raulb\OneDrive\Escritorio\MisKatas>
```

MisKatas > config.py > main

```python
def main():
    try:
        configuration = open('config.txt')
    except FileNotFoundError:
        print("Couldn't find the config.txt file!")
    except PermissionError:
        print("Found config.txt but it has a permission issue, couldn't read it")
    except IsADirectoryError:
        print("Found config.txt but it is a directory, couldn't read it")
    except (BlockingIOError, TimeoutError):
        print("Filesystem under heavy load, can't complete reading configuration file")


if __name__ == '__main__':
    main()
```

```python
try:
    open("mars.jpg")
except FileNotFoundError as err:
    print("got a problem trying to read the file:", err)
```

[18] ✓ 0.4s

```
got a problem trying to read the file: [Errno 2] No such file or directory: 'mars.jpg'
```

```python
try:
    open("config.txt")
except OSError as err:
    if err.errno == 2:
        print("Couldn't find the config.txt file!")
    elif err.errno == 13:
        print("Found config.txt but couldn't read it")
```

[19] ✓ 0.7s

... Couldn't find the config.txt file!

Ejercicio Astronautas

```python
def water_left(astronauts, water_left, days_left):
    daily_usage = astronauts * 11
    total_usage = daily_usage * days_left
    total_water_left = water_left - total_usage
    return f"Total water left after {days_left} days is: {total_water_left} liters"
```

[20] ✓ 0.3s

```python
water_left(5, 100, 2)
```

[21] ✓ 1.6s

... 'Total water left after 2 days is: -10 liters'

```python
def water_left(astronauts, water_left, days_left):
    daily_usage = astronauts * 11
    total_usage = daily_usage * days_left
    total_water_left = water_left - total_usage
    if total_water_left < 0:
        raise RuntimeError(f"There is not enough water for {astronauts} astronauts after {days_left} days!")
    return f"Total water left after {days_left} days is: {total_water_left} liters"
```

[23] ✓ 0.5s

```python
water_left(5, 100, 2)
```

[24] ⊗ 0.6s

...
```
---------------------------------------------------------------------------
RuntimeError                              Traceback (most recent call last)
c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 8' in <module>
----> 1 water_left(5, 100, 2)

c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 7' in water_left(astronauts, water_left, days_left)
      4 total_water_left = water_left - total_usage
      5 if total_water_left < 0:
----> 6     raise RuntimeError(f"There is not enough water for {astronauts} astronauts after {days_left} days!")
      7 return f"Total water left after {days_left} days is: {total_water_left} liters"

RuntimeError: There is not enough water for 5 astronauts after 2 days!
```

```python
    try:
        water_left(5, 100, 2)
    except RuntimeError as err:
        alert_navigation_systems(err)
```
[30] ⊗ 0.1s

```
---------------------------------------------------------------------------
RuntimeError                              Traceback (most recent call last)
c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 9' in <module>
      4 try:
----> 5     water_left(5, 100, 2)
      6 except RuntimeError as err:

c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 7' in water_left(astronauts, water_left, days_left)
      5 if total_water_left < 0:
----> 6     raise RuntimeError(f"There is not enough water for {astronauts} astronauts after {days_left} days!")
      7 return f"Total water left after {days_left} days is: {total_water_left} liters"

RuntimeError: There is not enough water for 5 astronauts after 2 days!

During handling of the above exception, another exception occurred:

NameError                                 Traceback (most recent call last)
c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 9' in <module>
      5     water_left(5, 100, 2)
      6 except RuntimeError as err:
----> 7     alert_navigation_systems(err)

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

```python
water_left("3", "200", None)
```
[31] ⊗ 0.2s

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 10' in <module>
----> 1 water_left("3", "200", None)

c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 7' in water_left(astronauts, water_left, days_left)
      1 def water_left(astronauts, water_left, days_left):
      2     daily_usage = astronauts * 11
----> 3     total_usage = daily_usage * days_left
      4     total_water_left = water_left - total_usage
      5     if total_water_left < 0:

TypeError: can't multiply sequence by non-int of type 'NoneType'
```

```
     water_left("3", "200", None)
[33]  ⊗  0.3s

...
     ---------------------------------------------------------------------------
     TypeError                                 Traceback (most recent call last)
     c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 11' in water_left(astronauts, water_left, days_left)
           3 try:
           4     # If argument is an int, the following operation will work
     ----> 5     argument / 10
           6 except TypeError:
           7     # TypError will be raised only if it isn't the right type
           8     # Raise the same exception but with a better error message

     TypeError: unsupported operand type(s) for /: 'str' and 'int'

     During handling of the above exception, another exception occurred:

     TypeError                                 Traceback (most recent call last)
     c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 12' in <module>
     ----> 1 water_left("3", "200", None)

     c:\Users\raulb\OneDrive\Escritorio\MisKatas\Modulo10Katas.ipynb Cell 11' in water_left(astronauts, water_left, days_left)
           5         argument / 10
           6     except TypeError:
           7         # TypError will be raised only if it isn't the right type
           8         # Raise the same exception but with a better error message
     ----> 9         raise TypeError(f"All arguments must be of type int, but received: '{argument}'")
          10 daily_usage = astronauts * 11
          11 total_usage = daily_usage * days_left

     TypeError: All arguments must be of type int, but received: '3'
```