00-try_and_except

June 10, 2022

```
[1]: # What happens if I do 10.5?
     age = int(input("What is your age: "))
```

What is your age: 10.5

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Input In [1], in <cell line: 2>()
      1 # What happens if I do 10.5?
----> 2 age = int(input("What is your age: "))

ValueError: invalid literal for int() with base 10: '10.5'
```

0.1   Try & Except Error Handling

```
try:
    code block 1
except ExceptionName:
    code block 2
```

```
[2]: try:
         age = int(input("What is your age: "))
     except ValueError:
         print("Please enter your age numerically and with only whole numbers.")
```

What is your age: 10.5

Please enter your age numerically and with only whole numbers.

```
[3]: # Reprompt user
     while True:
         try:
             age = int(input("What is your age: "))
             break
         except ValueError:
             print("Please enter your age numerically and with only whole numbers.")

     print(f"Your age is {age}")
```

What is your age: 10.5

Please enter your age numerically and with only whole numbers.

What is your age: Ten

Please enter your age numerically and with only whole numbers.

What is your age: 10

Your age is 10

[6]:
```python
# Using Raise
while True:
    try:
        age = int(input("What is your age: "))
        break
    except ValueError:
        print("Please enter your age numerically and with only whole numbers.")

if age < 18:
    raise Exception("Sorry, you need to be 18 or older.")

print(f"Your age is {age}")
```

What is your age: 99

Your age is 99

[8]:
```python
# Adding in Finally
while True:
    try:
        age = input("What is your age: ")
        age = int(age)
        break
    except ValueError:
        print("Please enter your age numerically and with only whole numbers.")
    finally:
        print(f"You said your age is {age}")

if age < 18:
    raise Exception("Sorry, you need to be 18 or older.")
```

What is your age: 19

You said your age is 19

[10]:
```python
# Using else for break
while True:
    try:
        age = input("What is your age: ")
```

2

```
        age = int(age)
    except ValueError:
        print("Please enter your age numerically and with only whole numbers.")
    else:
        break
    finally:
        print(f"Your age is {age}")

if age < 18:
    raise Exception("Sorry, you need to be 18 or older.")
```

What is your age: 10.5

Please enter your age numerically and with only whole numbers.
Your age is 10.5

What is your age: 19

Your age is 19

[ ]: