



Lab 9 – Exception Handling

Your task is to *create a module that has functions to validate user inputs.*

Code a module named *validator.py* that contains the following four **exportable** functions:

- `def enter_float_in_range(prompt, low, high):`
- `def enter_integer_in_range(prompt, low, high):`
- `def enter_an_integer(prompt):`
- `def enter_a_float(prompt):`

You are free to code any other functions (helpers?) if you like but you'll export only these four.

The *prompt* parameter is a pithy phrase like “Enter an integer” or *somesuch*. The parameters *low* and *high* are self-explanatory,

Here's a program that uses these functions; it's already coded *except for the import statement*:

```
# Your import statement goes here...

# Call functions in the validator module...
print( enter_integer_in_range( "Enter integer between 1 and 5", 1, 5) )
print( enter_float_in_range( "Enter float between 1.5 and 5.5", 1.5, 5.5)
)
print( enter_an_integer( 'Enter integer' ))
print( enter_a_float( 'Enter float' ))
```

Next page shows a sample run:

```
Enter integer between 1 and 5==> 56
56 not between 1 and 5. Try again
Enter integer between 1 and 5==> 4rd
Value entered is not an int. Try again
Enter integer between 1 and 5==> 4
4
Enter float between 1.5 and 5.5==> 36.58
36.58 not between 1.5 and 5.5. Try again
Enter float between 1.5 and 5.5==> sd4r
Value entered is not an float. Try again
Enter float between 1.5 and 5.5==> 2.71828
2.71828
Enter integer==> der
Value entered is not an int. Try again
Enter integer==> 34567
34567
Enter float==> 2lkjh
Value entered is not an float. Try again
Enter float==> 3.14159
3.14159
```

Note how each function has diagnostics peculiar to its job (range functions say # is not between, # is not an integer, etc).

Note when you call a range validator with out of range data, you get the out of range message; call with improper data type you get the message about the invalid data type. For example:

```
Enter integer between 1 and 5==> 56
56 not between 1 and 5. Try again
Enter integer between 1 and 5==> 4rd
Value entered is not an int. Try again
```