Exceptions

exception – an error that occurs while a program is running; usually causes the program to abruptly halt
traceback – error message that gives information regarding line numbers that caused the exception

`try` suite – statements that can potentially raise an exception
`except` suite (handler) – statements contained in the `except` block
      can catch specific or general errors
      can use the `as` syntax to assign the exception object to a variable
      similar to `else`/`elif` clause in decision structure
`else` suite (optional) – only executes if no exceptions are raised
`finally` suite (optional) – executes whether exception occurs or not; purpose is to perform code
cleanup before exiting
      appears after all `except` clauses

```
try:
     # statement(s) that may cause an error
     print(immovable_object < stuck and stuck < unstoppable_force)
except FileNotFoundError:
     print("No such file exists.")
except ValueError as err:
     print("Incorrect value input.\n" + err)
except:
     print("This tells me nothing except that there was an error.")
else:
     print("No error.")
finally:
     print("Closing program . . .")
```

Assignment

Create a program that takes two inputs, then displays the computation of the first input divided by the second input. Write the program in such a way that it will never crash, but will display what error would have crashed the program, then that it is closing the program.

Example program:

```
Enter the first value: 5
Enter the second value: 10
0.5
No error.
Closing program . . .
```