

Below is the working code and the output from figure 10.1.1

```
10.1.1.py - /Users/davidblackburn/Desktop/10.1.1.py (3.6.2) Python 3.6.2 Shell
user_input = ''
while user_input != 'q':
    try:
        weight = int(input("Enter weight (in pounds): "))
        height = int(input("Enter height (in inches): "))

        bmi = (float(weight) / float(height * height)) * 703
        print('BMI:', bmi)
        print('(CDC: 18.6-24.9 normal)\n') # Source www.cdc.gov
    except:
        print('Could not calculate health info.\n')
    user_input = input("Enter any key ('q' to quit): ")

Python 3.6.2 (v3.6.2:5fd33b5926, Jul 16 2017, 20:11:06)
[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/davidblackburn/Desktop/10.1.1.py =====
Enter weight (in pounds): 150
Enter height (in inches): 66
BMI: 24.207988980716255
(CDC: 18.6-24.9 normal)

Enter any key ('q' to quit): a
Enter weight (in pounds): one hundred and fifty
Traceback (most recent call last):
  File "/Users/davidblackburn/Desktop/10.1.1.py", line 3, in <module>
    weight = int(input("Enter weight (in pounds): "))
ValueError: invalid literal for int() with base 10: 'one hundred and fifty'
>>>
===== RESTART: /Users/davidblackburn/Desktop/10.1.1.py =====
Enter weight (in pounds): 150
Enter height (in inches): 66
BMI: 24.207988980716255
(CDC: 18.6-24.9 normal)

Enter any key ('q' to quit): a
Enter weight (in pounds): one hundred and fifty
Could not calculate health info.

Enter any key ('q' to quit): |
```

Below is the working code and the output from figure 10.2.1

```
10.2.1.py - /Users/davidblackburn/Desktop/10.2.1.py (3.6.2) Python 3.6.2 Shell
user_input = ''
while user_input != 'q':
    try:
        weight = int(input("Enter weight (in pounds): "))
        height = int(input("Enter height (in inches): "))

        bmi = (float(weight) / float(height * height)) * 703
        print('BMI:', bmi)
        print('(CDC: 18.6-24.9 normal)\n') # Source www.cdc.gov
    except ValueError:
        print('Could not calculate health info.\n')
    except ZeroDivisionError:
        print('Invalid height entered. Must be > 0.')
    user_input = input("Enter any key ('q' to quit): ")

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>>>
===== RESTART: /Users/davidblackburn/Desktop/10.2.1.py =====
Enter weight (in pounds): 150
Enter height (in inches): 66
BMI: 24.207988980716255
(CDC: 18.6-24.9 normal)

Enter any key ('q' to quit): a
Enter weight (in pounds): one hundred and fifty
Could not calculate health info.

Enter any key ('q' to quit): a
Enter weight (in pounds): 150
Enter height (in inches): 0
Invalid height entered. Must be > 0.
Enter any key ('q' to quit): q
>>> |
```

Below is the working code and output from figure 10.3.2

```
10.3.2.py - /Users/davidblackburn/Desktop/10.3.2.py (3.6.2) Python 3.6.2 Shell
user_input = ''
while user_input != 'q':
    try:
        weight = int(input("Enter weight (in pounds): "))
        if weight < 0:
            raise ValueError('Invalid weight.')

        height = int(input("Enter height (in inches): "))
        if height < 0:
            raise ValueError('Invalid height.')

        bmi = (float(weight) / float(height * height)) * 703
        print('BMI:', bmi)
        print('(CDC: 18.6-24.9 normal)\n') # Source www.cdc.gov
    except ValueError as except:
        print(except)
        print('Could not calculate health info.\n')
    except ZeroDivisionError as except:
        print(except)
        print('Could not calculate health info. \n')
    user_input = input("Enter any key ('q' to quit): ")

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>>>
===== RESTART: /Users/davidblackburn/Desktop/10.3.2.py =====
Enter weight (in pounds): 90
Enter height (in inches): 0
float division by zero
Could not calculate health info.

Enter any key ('q' to quit): a
Enter weight (in pounds): 166
Enter height (in inches): 55
BMI: 38.57785123966942
(CDC: 18.6-24.9 normal)

Enter any key ('q' to quit): a
Enter weight (in pounds): 180
Enter height (in inches): -5
Invalid height.
Could not calculate health info.

Enter any key ('q' to quit): a
Enter weight (in pounds): -2
Invalid weight.
Could not calculate health info.

Enter any key ('q' to quit): q
>>>
```

Below is the revised code from 4.9 with a try block integrated.

```
4.9CarCalcWithTry.py - /Users/davidblackburn/Desktop/Programming co Python 3.6.2 Shell
# Type your code here
errorInt = 1
while errorInt == 1:
    user_service = str(input('Enter desired auto service:\n'))

    services = {'Oil change':35, 'Tire rotation':19, 'Car wash':7}

    if user_service == 'Oil change':
        output_serv = 'oil change'
    elif user_service == 'Tire rotation':
        output_serv = 'tire rotation'
    elif user_service == 'Car wash':
        output_serv = 'car wash'

    print('You entered:', user_service)

    #if user_service == 'Oil change' or user_service == 'Tire rotation' or user
    try:
        print('Cost of %s: $%d' % (output_serv, (services[user_service])))
        errorInt = 0
    #else:
    except NameError:
        print('Error: Requested service is not recognized')
```

```
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[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: /Users/davidblackburn/Desktop/Programming copy/4Chap/4.9CarCalcWithTry
.py
Enter desired auto service:
Break
You entered: Break
Error: Requested service is not recognized
Enter desired auto service:
Car wash
You entered: Car wash
Cost of car wash: $7
>>> |
```

Below is the revised code from 5.14 with a try block.

```
5.14TriangleChap5WithTry.py - /Users/davidblackburn/Desktop/5 Python 3.6.2 Shell
errorInt = 1
while errorInt == 1:
    try:
        triangle_char = input('Enter a character:\n')
        triangle_height = int(input('Enter triangle height:\n'))
        print('')
        ast_str = ''
        errorInt = 0
    except ValueError:
        print('Error: Height must be an integer.')

    for i in range(triangle_height):
        ast_str += triangle_char + ' '
    print(ast_str)
```

```
Python 3.6.2 (v3.6.2:5fd33b5926, Jul 16 2017, 20:11:06)
[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: /Users/davidblackburn/Desktop/5.14TriangleChap5WithTry.py =====
Enter a character:
5
Enter triangle height:
three
Error: Height must be an integer.
Enter a character:
^
Enter triangle height:
5

^
^ ^
^ ^ ^
^ ^ ^ ^
^ ^ ^ ^ ^
>>> |
```

Below is the revised version of 8.16 with a try block integrated.

```

8.16WeightsWithTry.py - /Users/davidblackburn/Desktop/Python 3.6.2 Shell
#-----TRY--BLOCK-----
errorInt = 1
while errorInt == 1:
    try:
        weight_1 = float(input('Enter weight 1:\n'))
        weight_2 = float(input('Enter weight 2:\n'))
        weight_3 = float(input('Enter weight 3:\n'))
        weight_4 = float(input('Enter weight 4:\n'))
        if errorInt == 1:
            errorInt = 0
    except ValueError as excpt:
        print(excpt)
        print('Need integer')
        errorInt = 1

#-----FUNCTIONS-----
def find_avg(x):
    sum_num = 0
    for i in x:
        sum_num += i
    return sum_num / 4

def kilo_convert():
    return (weights[index_num - 1] / 2.2)

def sort_list():
    weights.sort()
    return weights

#-----BODY-----
weights = [weight_1, weight_2, weight_3, weight_4]

print('Weights: %s\n' % weights)

print('Average weight: %.2f' % find_avg(weights))
print('Max weight: %.2f\n' % max(weights))

index_num = int(input('Enter a list index (1 - 4):\n'))

print('Weight in pounds: %.2f' % weights[index_num - 1])
print('Weight in kilograms: %.2f\n' % kilo_convert())

print('Sorted list:', sort_list())

```

```

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[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: /Users/davidblackburn/Desktop/Programming copy/8Chap/8.16WeightsWithTr
y.py
Enter weight 1:
1
Enter weight 2:
2
Enter weight 3:
three
could not convert string to float: 'three'
Need integer
Enter weight 1:
1
Enter weight 2:
2
Enter weight 3:
3
Enter weight 4:
4
Weights: [1.0, 2.0, 3.0, 4.0]
Average weight: 2.50
Max weight: 4.00
Enter a list index (1 - 4):
1
Weight in pounds: 1.00
Weight in kilograms: 0.45
Sorted list: [1.0, 2.0, 3.0, 4.0]
>>>

```

Ln: 10 Col: 18 100% my activity Ln: 32 Col: 0

The next picture is of the code from the chapter 12 assignment. The only file that needed a try block was the one that writes to the file because if that can't fail then the reader should have no problem. So I only took a screenshot of that code running. The files submitted should have the information seen in the screenshot if you need proof.

```

golf_club_code_Try.py - /Users/davidblackburn/Desktop/Programming copy/12Chap/Golf/golf_club_c
errorInt = 1

def stats_add():
    player_stats = open('golf.txt', 'a')
    player_name = str(input('Enter Name of player: '))
    player_score = int(input('Enter Score of player: '))
    player_stats.write('%s %s\n' % (player_name, player_score))
    player_stats.close()

while errorInt == 1:
    try:
        players = int(input('Enter how many players to add to file: '))
        for i in range(players):
            stats_add()
        errorInt = 0
    except ValueError:
        print('Invalid data type. Name must be String and Score integer')

```

```

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[GCC 4.2.1 (Apple Inc. build 5666) (dot 3)] on darwin
Type "copyright", "credits" or "license()" for more information.
>>>
RESTART: /Users/davidblackburn/Desktop/Programming copy/12Chap/Golf/golf_club_c
ode_Try.py
Enter how many players to add to file: three
Invalid data type. Name must be String and Score integer
Enter how many players to add to file: 2
Enter Name of player: David
Enter Score of player: John
Invalid data type. Name must be String and Score integer
Enter how many players to add to file: 2
Enter Name of player: David
Enter Score of player: 12
Enter Name of player: John
Enter Score of player: 10
>>>

```