



Education and More, LLC

WE PROVIDE SOLUTIONS TO EDUCATIONAL PROBLEMS

Lesson 11 – Review

In this problem you will

- Use and assign variables
- Increase/decrease variables
- Create and use functions
- Use Return values
- Use while loops
- Use if/else statements
- Use print statements
- Use int and input functions
- Understand how to find formulas
- Use Comparison operators
- Use concatenation
- Use try/except
- Use indentations.
- Use comments

The Problem

Create an eight-sided figure based on the input of length of each side (min 2). Example if input is 3

```
  * * *  
 *      *  
*        *  
*        *  
*        *  
 *      *  
  * * *
```

Items to do

- 1) Make sure you understand the problem!!!!
- 2) Notice the different pieces of the problem
- 3) Get the input
- 4) Find the formulas for all the pieces
- 5) Do the top and bottom piece first
- 6) Do the rest of the pieces
- 7) Test

Homework for Lesson 11

- 1) Make sure you understand the logic behind what we did
- 2) Comment all the functions
- 3) Make sure you understand the try and except block
- 4) Break the print_diagonal into 2 functions.
- 5) Start a new Python file and try to code it again by yourself. Same program. Repetition is great for learning.
- 6) Create an X using *s. Like the following.

```
 *   *
  *  *
   *
  *  *
 *   *
```

- 7) Now what should the request be? In other words that X – is it based on num=2? num = 3? num = 5?
- 8) Determine if there are any limits. Example if that is Num=5, then can you have say, num=4? Being able to understand limits is an important part of being a good programmer.
- 9) Now create the following:

```
*****
** **
* * *
** **
*****
```

As you can see it is hard to tell what needs to be done – so do it bigger. All it is, is number 6 with a border of *s. Just fill the outside with *s.