

Lab #2:

You can complete all of these in one file if you like. Do not forget about adding comments to your code. Add line breaks to make the displayed results easier to read.

A. Create a list of at least 4 file names with extensions. Then print out two statements as follows:

Example:

```
files = ['index.html', 'biography.ppt']
```

The file name is: index

The file type is: html

The file name is: biography

The file type is: ppt

B. Ask the user for a number. Depending on whether the number is even or odd, print out an appropriate message to the user.

hint: you will need to define the input as an integer

```
x = int(input("Enter a number: "))
```

C. Create a program that asks the user for a number and then prints out a list of all the divisors of that number.

A divisor is a number that divides evenly into another number.

Example:

input of 45 should yield a result of 1, 3, 5, 9, 15, 45

Include appropriate messages for the user for both input and output results

D. Write a program that returns a list that contains only the elements that are common between the lists (without duplicates). Make sure your program works on two lists of different sizes

```
a = ['eggs', 'flour', 'chocolate chips', 'butter', 'sugar', 'vanilla', 'cookie sheet']
```

```
b = ['flour', 'brown sugar', 'cake pan', 'eggs', 'chocolate chips']
```

result should be : ['eggs', 'flour', 'chocolate chips']

E. Write a function within a program that calculates the square of a number, and prints it out.

Example:

number in is: 5

square is: 25

F. Write a function that accepts 2 numbers and returns the highest.

Be sure this works no matter what order the numbers are in.

Print appropriate messages for the user.