

Exercise 1:

Create a variable that has an int value and another variable that has a float value. Write code that prints the product (multiply the two variables together).

Hint: To multiply numbers in Python, use the asterisk sign (*).

```
In [2]: x = 7
        y = 1.50

        a = x*y
        print (a)
```

10.5

```
In [5]: c = 'The world without music is a food without smell'
        print (c)
```

The world without music is a food without smell

```
In [9]: x
```

Out[9]: 7

```
In [15]: d = ", then I will walk 9 miles."
        print (c + d)
```

The world without music is a food without smell, then I will walk 9 miles.

```
In [24]: if y != 7:
        print('It is not seven.')
        else:
        print('it is seven.')
```

It is not seven.

Exercise 2:

Make a list of all the months in the year. Write code that uses a loop to go through the list, print out the month and the number of characters (length) for each month word.

```
In [2]: months = ['Jan', 'Feb', 'March', 'April', 'June']
```

```
In [3]: for names in months :  
        print(names)
```

```
Jan  
Feb  
March  
April  
June
```

```
In [14]: print(len(months))
```

```
5
```

```
In [26]: fruits = ['mango', 'apple', 'banana', 'kiwi'] #value in list  
  
        for item in fruits:  
            print(item) #for loop code
```

```
mango  
apple  
banana  
kiwi
```

```
In [28]: print(len(fruits))  
        print(len(c + d))
```

```
4  
74
```

Exercise 3:

Create a dictionary with keys "movie" and "season", with the values being your favorite movie and season. Then write code to print out "My favorite [key] is [value]".

```
In [29]: fruit = {'apple': 'green',  
                 'grape': 'purple',  
                 'banana': 'yellow'}  
        print(fruit)
```

```
{'apple': 'green', 'grape': 'purple', 'banana': 'yellow'}
```

```
In [30]: fruit['avocado'] = 'green'  
        print(fruit)
```

```
{'apple': 'green', 'grape': 'purple', 'banana': 'yellow', 'avocado': 'green'}
```

```
In [31]: Favorite = {'The office' : 'spring', 'Lord of the ring' : 'summer', 'Starborn'  
                    : 'winter', 'Startrek' : 'summer'}
```

```
In [32]: print(Favorite)
```

```
{'The office': 'spring', 'Lord of the ring': 'summer', 'Starborn': 'winter',  
'Startrek': 'summer'}
```

```
In [34]: #print key
```

```
print(Favorite['The office'])
```

```
spring
```

```
In [39]: for bobo,numnum in Favorite.items(): #.item funtion pair up key and value in d  
         dictionary  
         print('My favorit movie is ' + bobo + ' ,and my favorit season is ' + num  
         num + '.')
```

```
My favorit movie is The office ,and my favorit season is spring.  
My favorit movie is Lord of the ring ,and my favorit season is summer.  
My favorit movie is Starborn ,and my favorit season is winter.  
My favorit movie is Startrek ,and my favorit season is summer.
```

```
In [45]: Favorite['Avenger'] = 'summer'  
         Favorite.values()
```

```
Out[45]: dict_values(['spring', 'summer', 'winter', 'summer', 'summer'])
```

Exercise 4:

Create a customized function (def) that divides two variables and returns the result of their division. Then call your function using the variables you made in Exercise 1.

Hint: To divide numbers in Python, use the forward slash (/).

```
In [37]: def addNum(num1, num2):  
         return num1 + num2
```

```
In [38]: x = 10  
         y = 2
```

```
In [39]: addNum(x, y)
```

```
Out[39]: 12
```

```
In [40]: def addNum(num1, num2):  
         return num1 / num2
```

```
In [41]: addNum(x, y)
```

```
Out[41]: 5.0
```

```
In [50]: v = 11  
        w = 0
```

```
In [48]: def minus(dog, cat):  
        return dog - cat
```

```
In [51]: minus(v,w)
```

```
Out[51]: 11
```