

day30 function

Due: 6th period: Thursday 10/21

7th period: Friday 10/22

Today's assignment:

Create new file called day30 functions, save it to your folder on the computer Desktop. Or, if you're using repl, create a repl and do the program there.

1.

Write a function that prints your name. Name the function `printName()` like this:

```
def printName()
```

The function needs to print your first and last names, and then print your name centered in 25 stars, then your name all uppercase.

Call the function by putting this line in your program, below where you defined the function, not indented:

```
printname()
```

2.

Write a function called **printStars** that accepts a number and prints that many stars on a single line. You will start by writing this line:

```
def printStars(num):
```

Then, indented one level, write a for loop that prints `num` stars all on one line, then prints a blank line. Test your code by putting a line below your function that looks like this:

```
printStars(10)
```

Make sure this line is not inside of the function (it has to be unindented all the way to the left.) Here is sample output for the call `printStars(10)`:

```
*****
```

3.

Write a function called **printList** that accepts a list variable and a number, and then prints the list in that many columns. Start like this:

```
def printList(theList, columns):
```

Then, inside the function, write code that prints all of the items in the list (use a for loop) in the right number of columns (whatever the variable `columns` is). Put tabs between list items. At the end print a blank line so that you are safely out of column printing mode.

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Test the function by adding these lines below it, not indented:

```
myList = [1,3,5,7,9,11,13,15,17,19]
printList(myList,3)
print()
printList(myList,5)
```

You will get the following output:

```
1      3      5
7      9      11
13     15     17
19
```

```
1      3      5      7      9
11     13     15     17     19
```

Can you see how the above shows the list printed in three columns, then again in 5 columns?

Make your function work even if your list variable doesn't contain numbers. Add a third test as follows:

```
myList=["a","b","c","d","e","f","g","h","i","j","k"]
printList(myList,4)
```

You should get the following:

```
a      b      c      d
e      f      g      h
i      j      k
```

4.

Write a function called **primeCheck** that accepts a number, doesn't print anything, and uses a return call to say if a number is prime or not.

Start like this:

```
def primeCheck(num):
```

Then inside, check if num is prime. If it is return "prime", if it is not return "composite" (in math talk that means "not prime".) Your function should not print anything. We learned how to figure out if a number is prime in our day24 assignment. You should be able to copy some of that code.

Test your code with the following:

```
print(400,primeCheck(400))
print(401,primeCheck(401))
```

The output should be:

```
400 composite
401 prime
```

Turn your file in on the Google Classroom when you are done.