Why would I use either of these?

```
int addDigit(int valueSoFar, char digit)
{
        int result;
        printf("Value so far is: %d.\n", valueSoFar);
        printf("Digit is: %c.\n", digit);
        printf("Please enter the value with digit on the end: ");
        scanf("%d", &result);
        return result;
}
```

```
int main(void)
{
        int val;   char dig;
        printf("Enter a value so far and a digit to test: ");
        scanf("%d %c", &val, &dig);
        printf("addDigit returns: %d.\n", addDigit(val, dig);
}
```


How about these?

```
int isDivisibleBy(int num, int divisor)
{
        int result;
        printf("Is %d divisible by %d? (1 for yes, 0 for no): ",
                num, divisor);
        scanf("%d", &result);
        return result;
}
```

```
int main(void)
{
        int num, div;
        printf("Enter a number and divisor to test: ");
        scanf("%d %c", &num, &div);
        printf("isDivisibleBy returns: %d.\n",
                isDivisibleBy(num, div);
}
```


One more!

```
void printAnswer(int blsPrime)
{
        printf("blsPrime is %d.\n", blsPrime);
}
```

```
int main(void)
{
        int blsPrime;
        printf("Testing printAnswer.\n");
        printf("Enter 1 for prime or 0 for composite: ");
        scanf("%d", &blsPrime);
        printAnswer(blsPrime);
}
```


HW#3 is all about…

FUNCTIONAL DECOMPOSITION!

- design the program
- write *and* test each piece separately
- put them together when you know they work

Don't think of HW#3 as **one big assignment**!
Think of it as many **small** assignments!
Do each one separately.
Also, floss every day and brush your teeth thrice!