# Calling a Function

In this lesson, we will go over function invocation.

**We'll cover the following**


- A Simple Function Call
- Calling Functions within Functions


## A Simple Function Call #

When you want to use a function, it needs to be invoked by being **called** upon. You call a user-defined function the same way you call a built-in function; by calling its name followed by the input in `()`. Let's call the `newPrint` function and `sum` function we defined in the previous lesson.

> We will be storing the return value of any function with a return value in a variable `result`.

```
// Print the statement "Function Called"
void newPrint(){
  print("Function Called");
}

// Return the sum of two numbers
num sum(num x, num y){
  return x+y;
}

main() {
  // Calling newPrint
  newPrint();

  //Calling sum
  var result = sum(5,3);
  print(result);
}
```

On **line 13** of the code snippet above, we are simply calling the `newPrint` function which in return is printing `Function Called`.

On **line 16** we are passing **5** and **3** to the function `sum`, which will add them together and return their sum. This sum will then be stored in the variable `result` whose value we are printing on **line 17**.

## Calling Functions within Functions #

Sometimes we come across a situation where the functionality of an already existing function is required in a new function. Instead of rewriting code, we can simply call the old function in the body of the new one we are writing. This will be made clear with an example.

Let's write a function which gives us the square of a given number.

```
num square(num x) {
  return x * x;
}

main() {
  // Driver Code
  var result = square(5);
  print(result);
}
```

Now, we want to write a function that takes the sum of the squares of two numbers. Let's try doing this using the `square` function we just defined above.

```
num squareSum(num x, num y){
  return square(x) + square(y);
}
```

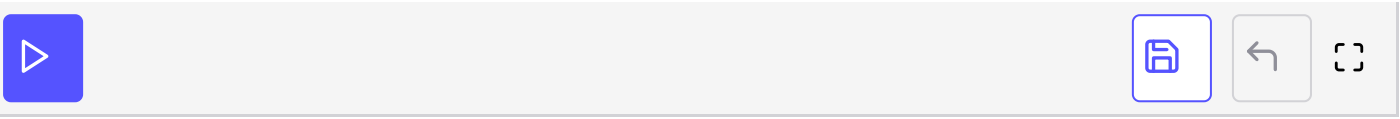
In the code above, we are calling the function `square` in the function `SquareSum`. Let's call `SquareSum` and see what happens.

```
// Function to find the square of a number
num square(num x) {
  return x * x;
}

// Function to find the sum of the squares of two numbers
num squareSum(num x, num y){
  return square(x) + square(y);
}
```

```
main() {
  var result = squareSum(2,5);

  print(result);
}
```



Now that you've learned how to write your own function, try writing a function yourself in the next lesson.