Data Flows

You may return more than one value from a function by using reference parameters to return values through the argument list.

As an example, suppose that you are writing a program to solve the quadratic equation below and you want to structure that program into three IPO phases like this:



Using this plan, your main function might look like this:

```
int main()

double a, b, c, root1, root2;

getCoefficients(a, b, c);

solveQuadratic(a, b, c, root1, root2);

printRoots(root1, root2);

}
```

Here's what's happening:

- In line 4, the variables a, b and c are output parameters. Instead of passing values into the function, we're supplying three variables which will be filled up in the function itself.
- In line 5, a, b and c are **input** parameters. We are supplying their values to the **solveQuadratic** function so that it can do its work.
- The variables **root1** and **root2** are **output** parameters on Line 5; they will be filled in inside the function. On line 6, they are **input** parameters.



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