Overloaded Functions

# Create Project

* 1. Create a new C++ project. Call OverloadedFunctionsDemo.
  2. Add standard includes and main function:

#include <iostream>

#include <string>

using namespace std;

int main()

{

return 0;

}

# Add Some Overloaded Functions

* 1. Add the following functions:

void SayGoodnight()

{

cout << "Good night!" << endl;

}

void SayGoodnight(string name1)

{

cout << "Good night " << name1 << "!" << endl;

}

void SayGoodnight(string name1, string name2)

{

cout << "Good " << name1 << " and " << name2 << "!" << endl;

}

void SayGoodnight(int number)

{

for (int i = 0; i < number; ++i)

{

cout << "Good night! " << endl;

}

}

* 1. Add function prototypes at top of program:

void SayGoodnight();

void SayGoodnight(string name1);

void SayGoodnight(string name1, string name2);

void SayGoodnight(int number);

# Call functions from main:

* 1. Call the parameterless function:

SayGoodnight();

* 1. Run with ctrl-F5
  2. Add a call to the one parameter function:

string name;

getline(cin, name);

SayGoodnight(name);

* 1. Run with ctrl-F5
  2. Add a call to the two parameter function:

cout << "Name one: ";

string nameFirst;

getline(cin, nameFirst);

cout << "Name second: ";

string nameSecond;

getline(cin, nameSecond);

SayGoodnight(nameFirst,nameSecond);

* 1. Run with ctrl-F5
  2. Add a call to the function that takes one int parameter:

cout << "Number: ";

int number;

cin >> number;

SayGoodnight(number);

* 1. Run with ctrl-F5

Question: How does C++ differentiate between SayGoodnight(name); and SayGoodnight(number);?