



# BASIC INPUT/OUTPUT

## C++ BASICS

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# TOPIC OUTLINE

Header File

Standard Output

Standard Input

Reading Strings



# STANDARD INPUT/OUTPUT LIBRARY



# HEADER FILE

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To perform I/O operations, you need to include the <iostream> header file:

```
#include <iostream>
```

Example:

```
#include <iostream>
```

```
using namespace std;
```

```
int main() {
```

```
    cout << "Hello, World!" << endl;
```

```
    cout << "This is C++." << endl;
```

```
    return 0;
```

```
}
```



# STANDARD OUTPUT

---

`std::cout` (character output) is used to display output to the console. The `<<` operator (insertion operator) is used to send data to `cout`.

Example:

```
#include <iostream>

// using namespace std;

int main() {

    std::cout << "Hello, World!" <<
    endl;

    std::cout << "This is C++." << endl;

    return 0;

}
```



# STANDARD INPUT

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`std::cin` (character input) is used to read input from the user. The `>>` operator (extraction operator) is used to extract data from **`cin`**.

Example:

```
#include <iostream>

// using namespace std;

int main() {

    int age;

    std::cout << "Enter your age: ";

    std::cin >> age;

    std::cout << "You are" << age <<
    "y/o";

    return 0;

}
```



# READING STRINGS

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To read strings (including spaces), use `getline()` instead of `cin`.

Example:

```
#include <iostream>

#include <string>

using namespace std;

int main() {

    string full_name;

    cout << "Enter your full name: ";

    getline(cin, name);

    cout << "Hello, " << name;

    return 0;

}
```



## EXERCISE

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Determine the output of this code snippet:

```
string full_name = "";  
  
cin >> full_name;  
  
cout << full_name;
```

input:

Ada Lovelace

output:

Determine the output of this code snippet:

```
string full_name = "";  
  
getline(cin, full_name);  
  
cout << full_name;
```

input:

Ada Lovelace

output:





# LABORATORY



# LABORATORY 2

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Reference:

[L4 Lab-2 Simple Decimal-to-Binary Converter.pdf](#)

