BASIC INPUT/OUTPUT

C++ BASICS

prepared by:

Gyro A. Madrona
Electronics Engineer

TOPIC OUTLINE

Header File

Standard Output

Standard Input

Reading Strings

STANDARD INPUT/OUTPUT LIBRARY

HEADER FILE

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

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

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

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