C++ Primer Notes

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1 Begin

1.1 Writing a Simple C++ Program

1.1.1 Example 1_1_1

```cpp
#include<iostream>
using std::cout;
using std::endl;
int main()
{
    cout<<"Hello world"<<endl;
    return 0;
}
```

1.1.2 Compiling and Executing Our Program

1. Comliling

```
#!/bin/bash
cd Code
g++ hello.cpp -o Hello
```

In the next, I just use Automake to compile.

2. Executing ./Hello

1.1.3   Exercise

1. Exercise 1.2 Change the program to return -1. A return value of -1 is often treated as an indicator that the program failed. Recompile and rerun your program to see how your system treats a failure indicator from main.

    (a) Answer

    ```
    #include<iostream>

    int main()
    {
        return -1;
    }
    ```

1.2   A First Look at Input/Output

1.2.1   Standard Input and Output Objects

The library defines four IO objects:

1. istream:cin

2. ostream:cout

3. cerr

4. clog

1.2.2   A Program That Uses the IO Library

```
#include<iostream>
int main()
{
    std::cout<<"Enter two numbers : "<<std::endl;
```

```
    int v1=0,v2=0;
    std::cin>>v1>>v2;
    std::cout<<"The sum of "<<v1<<"and "<<v2<<" is "<<v1+v2<<std::endl;
    return 0;
}
```

1.2.3   Writing to a Stream

```
std::cout<<"Enter two number"<<std::endl;
```

std::cout is a object in iostream(extends from isteam and ostream), specifi-
cally, in libary ostream, the operator "«"