Basic Programs

Print Hello World

hello_world.cpp

```
#include <iostream>
int main(){
    std::cout << "Hello, Modern C++" << std::endl;
}
```

To run the above program, following are the steps:

- Compile the code using the command: c++ hello_world.cpp
  This will generate a file with name a.out
- This can be executed with command: ./a.out
  This will print "Hello, Modern C++" on the screen.

Print the input on screen

print_input.cpp

```
#include <iostream>
using namespace std;
int main(){
    int num;
    cout << "Please enter any number: " << endl;
    cin >> num;
    cout << "number is " << num << endl;
    cerr << "boring error message" << endl;
    return 0;
}
```

After compiling the code, we can save:

- The output on file stdout.txt with command: ./a.out 1> stdout.txt

```
Please enter any number:
number is 22
```

- The error on file stderr.txt with command: ./a.out 2> stderr.txt

```
boring error message
```

- With command: ./a.out, the following appears on terminal

```
Please enter any number:
22
number is 22
boring error message
```