

15.1 WAP in C++ to read and write from and to a file using ifstream and ofstream.

15.2 WAP in C++ to perform these tasks:

- a. Read from a file using fstream [char by char]
- b. Write into a file using fstream
- c. Append into a file using fstream

15.3 WAP in C++ for IO manipulators mentioned below:

- a. **IOS:** hex,dec,skipws,noskipws
- b. **Istream:** ws
- c. **Ostream:** endl, ends, flush
- d. **Iomanip:** setw, setprecision

16.1 WAP in C++ to create a genetic add function for given tasks:

- a. Perform add over two integers and return integer
- b. Perform add over one int and one float and return double

16.2 WAP in C++ to perform these tasks:

- a. Catch a Divide by zero exception in $z = x/y$ using "**throw runtime_error**"
- b. What will be the output of this program and why?

```
#include <iostream>
using namespace std;

int main()
{
    try {
        throw 'a';
    }
    catch (int x) {
        cout << "Caught " << x;
    }
    catch (...) {
        cout << "Default Exception\n";
    }
    return 0;
}
```

- c. What will be the output of this program and why?

```
#include <iostream>
using namespace std;

int main()
{
    try {
        throw 'a';
    }
    catch (int x) {
        cout << "Caught ";
    }
    return 0;
}
```

- d. Rethrow and catch an exception by creating a separate user defined divide function for condition divide by zero.