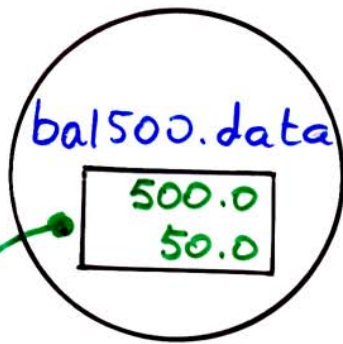
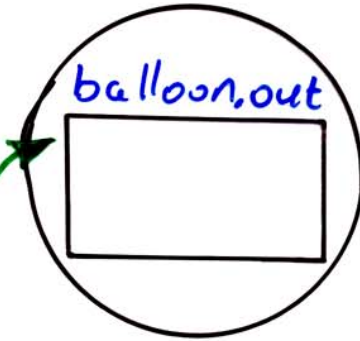


balfile.h

balfile.epp



input data file



output data file

`getballoon()`

`main()`

volume `500.0`
 mass `50.0`

req_payload
 lo_alt
 hi_alt
 epsilon
 altitude

n
 dalt
 i
 tab `'t'`

class Balloon

private:

volume `500.0`
 mass `50.0`

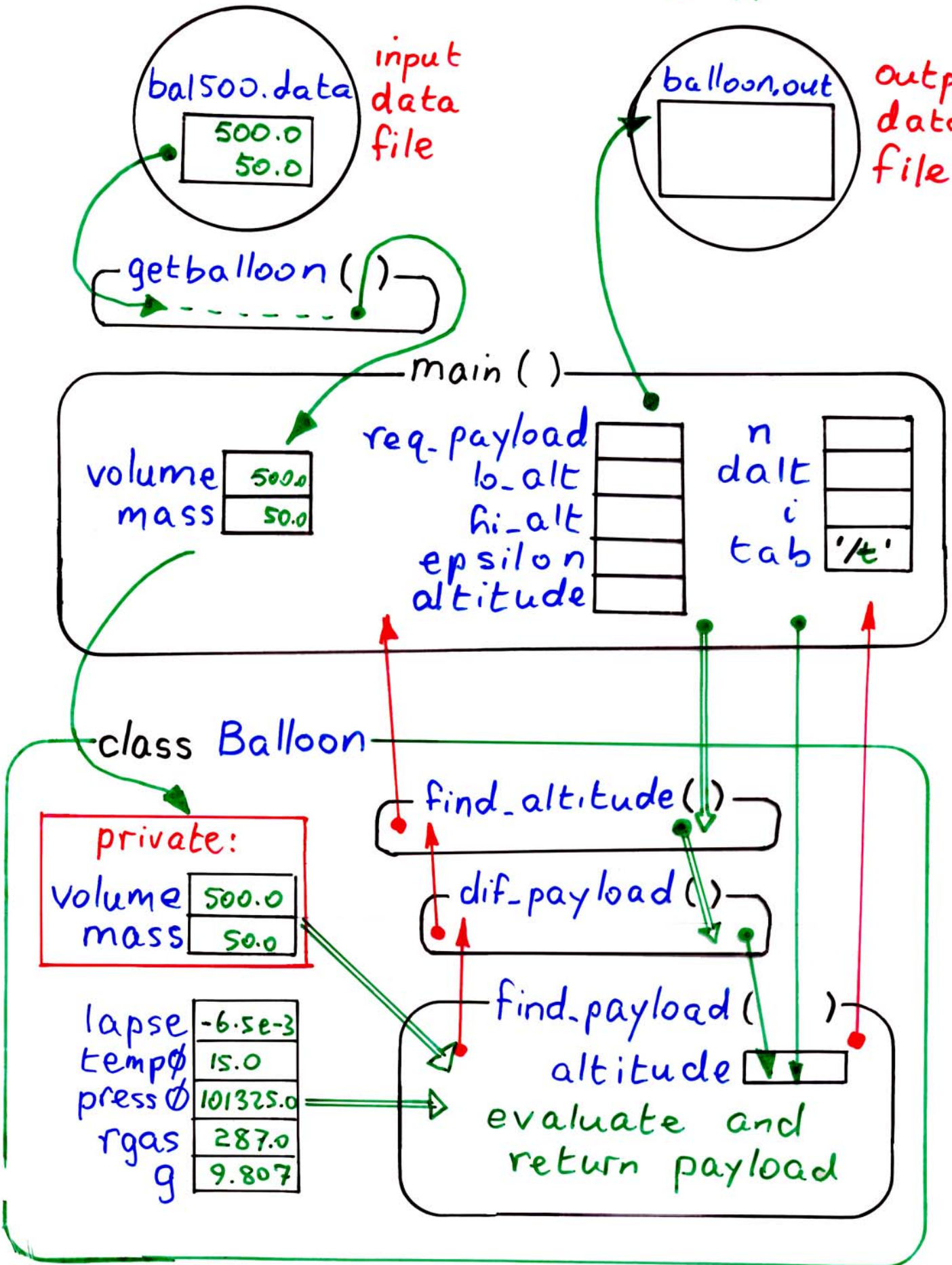
lapse `-6.5e-3`
 temp `15.0`
 press `101325.0`
 rgas `287.0`
 g `9.807`

`find_altitude()`

`dif_payload()`

`find_payload()`
 altitude

evaluate and return payload



```
using namespace std;
#include <iostream>
#include <fstream>
#include <assert>
#include "balfile.h"
void getballoon(float & volume, float & mass);
```

```
int main(void)
```

```
{
    float volume, mass;
    getballoon(volume, mass);
    Balloon myballoon(volume, mass);
    ;
    return 0;
}
```

```
void getballoon(float & volume, float & mass)
```

```
{
    cout << "get data from \" bal500.data \" file \n";
    ifstream balfile("bal500.data");
    assert(balfile);
    balfile >> volume >> mass;
    cout << "data read: "
         << volume << mass << endl;
    char ch;
    while (balfile.get(ch))
        cout << ch;
    balfile.close();
}
```