

```
#include<iostream>
#include<math.h>

#include "pdd.h"//including header file

int main(int arg, char**argv){

    float current_error = 0.1;
    float preerror=0.1;
    PID_ctrl controller(2.0,1.0,0.01,0.1); // constructor call
    std::cout << controller.calc_ctrl_PID(current_error,preerror) << std::endl;

    current_error = 0.5;
    preerror=0.1;
    std::cout << controller.calc_ctrl_PID(current_error,preerror) << std::endl;

    return 0;
}
```