

```
1  /*-----*/
2  /*  5249Z-Ignite                                */
3  /*  Version: 1.2.0                                */
4  /*  File: PID.h                                    */
5  /*  Description: header file for PID class        */
6  /*-----*/
7  #include "RobotConfig.h"
8
9  class PID {
10     private:
11         double kP, kI, kD;
12         double integral = 0;
13         double prevError;
14         double samplePeriod;
15     public:
16         PID(double, double, double, double);
17         double setPoint;
18         double calculatePID(double);
19         void setGains(double, double, double);
20         void reset();
21 };
```