

```

#include <iostream>
#include <cstdlib>

class throttle
{
public:
    void shut_off();
    void shift(int amount);
    double flow() const;
    bool is_on() const;
    bool More_than_half() const;
private:
    int position;
};

void throttle::shut_off()
{
    position = 0;
}

void throttle::shift(int amount)
{
    position += amount;
    if (position < 0)
        position = 0;
    else if (position > 6)
        position = 6;
}

double throttle::flow() const
{
    return position / 6.0;
}

bool throttle:: More_than_half() const
{
    return (flow() > .5);
}

bool throttle::is_on() const
{
    return (flow() > 0);
}

int main()
{

```

```
throttle sample;
int user_input;

std::cout << "I have a throttle with 6 positions." << std::endl;
std::cout << "Where would you like to set the throttle? " << std::endl;
std::cout << "Please type a number from 0 to 6: ";
std::cin >> user_input;
sample.shut_off();
sample.shift(user_input);

while (sample.is_on())
{
    std::cout << "The flow is now " << sample.flow() << std::endl;
    sample.shift(-1);
}
std::cout << "The flow is now off" << std::endl;
return EXIT_SUCCESS;
}
```