

Core1

16mA

core 2

```
#include <iostream>
```

```
extern "C" int InitHardware();
extern "C" int WriteDigital(int chan, char level);
extern "C" int Sleep(int sec, int usec);
```

```
int main(){
    for(int i = 0; i < 5; i++){
        InitHardware();
        WriteDigital(7,1);
        Sleep(1,0);
        WriteDigital(7,0);
        Sleep(1,0);
    }
    return 0;
}
```

core 3

```
#include <stdio.h>
```

```
extern "C" int InitHardware();
extern "C" int WriteDigital(int chan, char level);
extern "C" int Sleep(int sec, int usec);
extern "C" int ReadAnalog(int ch_adc);
```

```
int main(){
    InitHardware();
    while(true){
        int number = ReadAnalog(0);
        printf("%d", number);
        if (number > 100){
            WriteDigital(7,1);
        }
        else if (number < 6) {
            WriteDigital(7,0);
        }
        else {
            WriteDigital(7,0);
        }
        Sleep(0,100000);
    }
}
```

```
        return 0;
    }
}
```

core4

core5

```
#include <stdio.h>
```

```
extern "C" int InitHardware();
extern "C" int WriteDigital(int chan, char level);
extern "C" int Sleep(int sec, int usec);
extern "C" int SetMotor(int motor, int dir, int speed);
```

```
int main(){
    string direction = "left";
    turn(direction)
}
int turn(string direction){
    InitHardware();
    if (direction == "left"){
        WriteDigital(7,1);
        SetMotor(1, 0, 225);
        SetMotor(0, 1, 225);
    }
    if (direction == "right") {
        WriteDigital(7,1);
        SetMotor(1, 1, 225);
        SetMotor(0, 0, 225);
    }
    return 0;
}
```

challenge1

```
#include <stdio.h>
```

```
extern "C" int InitHardware();
extern "C" int WriteDigital(int chan, char level);
extern "C" int Sleep(int sec, int usec);
extern "C" int ReadAnalog(int ch_adc);
extern "C" int SetMotor(int motor, int dir, int speed);
```

```
int main(){
    InitHardware();
    while(true){
        int number = ReadAnalog(0);
```

```
    printf("%d", number);  
    if (number > 150){  
        WriteDigital(7,1);  
        SetMotor(1, 1, 0);  
    }  
    else if (number < 6) {  
        WriteDigital(7,0);  
        SetMotor(1, 1, 0);  
    }  
    else {  
        WriteDigital(7,0);  
        SetMotor(1, 1, 150);  
    }  
    Sleep(0,100000);  
}  
return 0;  
}
```