**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);

in 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;

}

**challange1**

#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;

}