

# Métodos iRobot\_Framework

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## *Métodos principales*

Lista de comandos recomendados para usar en la práctica 3:

- `int connect();`
- `void start();`
- `void full();`
- `void drive(int speed, int radius);`
- `void driveDirect(int rightVelocity, int leftVelocity);`
- `int updateSensor(char sensorId);`
- `void setVerbosity(int flag_debug);`

## *Códigos de sensores para el método updateSensor*

```
namespace iRobotSensors{
    static const char BUMPERS_AND_WHEELDROPS = (char) 7;
    static const char WALL = (char) 8;
    static const char CLIFFLEFT = (char) 9;
    static const char CLIFFFRONTLEFT = (char) 10;
    static const char CLIFFFRONTRIGHT = (char) 11;
    static const char CLIFFRIGHT = (char) 12;
    static const char VIRTUALWALL = (char) 13;
    static const char MOTOR_OVERCURRENTS = (char) 14;
    static const char IRBYTE = (char) 17;
    static const char BUTTONS = (char) 18;
    static const char DISTANCE = (char) 19;
    static const char ANGLE = (char) 20;
    static const char CHARGINGSTATE = (char) 21;
    static const char VOLTAGE = (char) 22;
    static const char CURRENT = (char) 23;
    static const char TEMPERATURE = (char) 24;
    static const char CHARGE = (char) 25;
    static const char CAPACITY = (char) 26;
    static const char WALLSIGNAL = (char) 27;
    static const char CLIFFLEFTSIGNAL = (char) 28;
    static const char CLIFFFRONTLEFTSIGNAL = (char) 29;
    static const char CLIFFFRONTRIGHTSIGNAL = (char) 30;
    static const char CLIFFRIGHTSIGNAL = (char) 31;
    static const char USERDIGITAL = (char) 32;
    static const char USERANALOG = (char) 33;
    static const char CHARGINGSOURCES = (char) 34;
    static const char OIMODE = (char) 35;
    static const char SONGNUMBER = (char) 36;
    static const char SONGPLAYING = (char) 37;
    static const char STREAMPACKETS = (char) 38;
    static const char VELOCITY = (char) 39;
    static const char RADIUS = (char) 40;
    static const char RIGHTVELOCITY = (char) 41;
    static const char LEFTVELOCITY = (char) 42;
}
```

## Otros métodos disponibles

Otros comandos disponibles:

- `void leds(int ledBit, int ledColor, int ledIntensity);`
- `void digitalOutputs(int outputBits);`
- `void lowSideDrivers(char outputBit);`
- `void pwmLowSideDrivers(int driver2, int driver1, int driver0);`
- `void song (int songNumber, int songSize, char *song);`
- `void playSong(int songNumber);`
- `void baud(char code);`
- `void control();`
- `void safe();`
- `void stream(char* sensorIdList, int size);`
- `int queryList(char * sensorIdList, int size);`
- `void PauseResumeStream(bool bol);`
- `void sendIr(int data);`
- `void demo(char code);`
- `void spot();`
- `void cover();`
- `void coverAndDock();`

## Métodos para usar con precaución

Evitaremos el uso de las funciones que programan scripts ya que pueden bloquear el robot si no se usan adecuadamente.

- `void script(int *commandList, int size);`
- `void playScript();`
- `void showScript();`
- `void waitTime(int seconds);`
- `void waitDistance(int mm);`
- `void waitAngle(int degrees);`
- `void waitEvent(int eventId);`