



Logic

Space



Coding



Focus



Classroom Discipline

01

Please sit down and keep quiet in class.

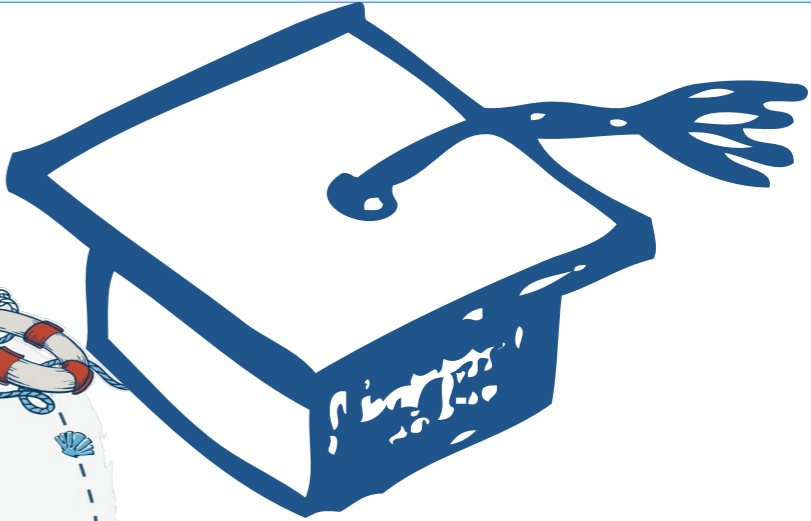
02

Please raise your hand if you have any questions

03

Please observe carefully when the pictures are played.





The

Intelligent Car



Course Goals



Thinkidea

1

Learning goals

2

Project Discussion

3

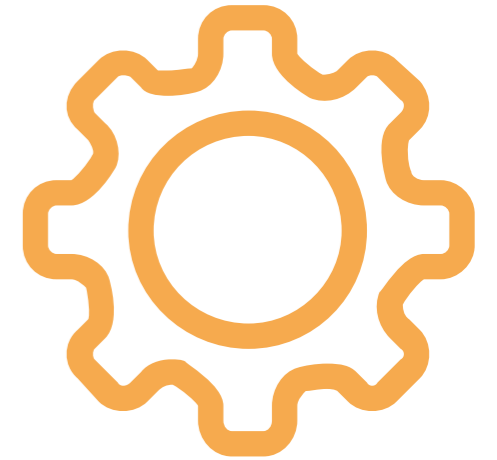
Logic Programming

4


Have a try

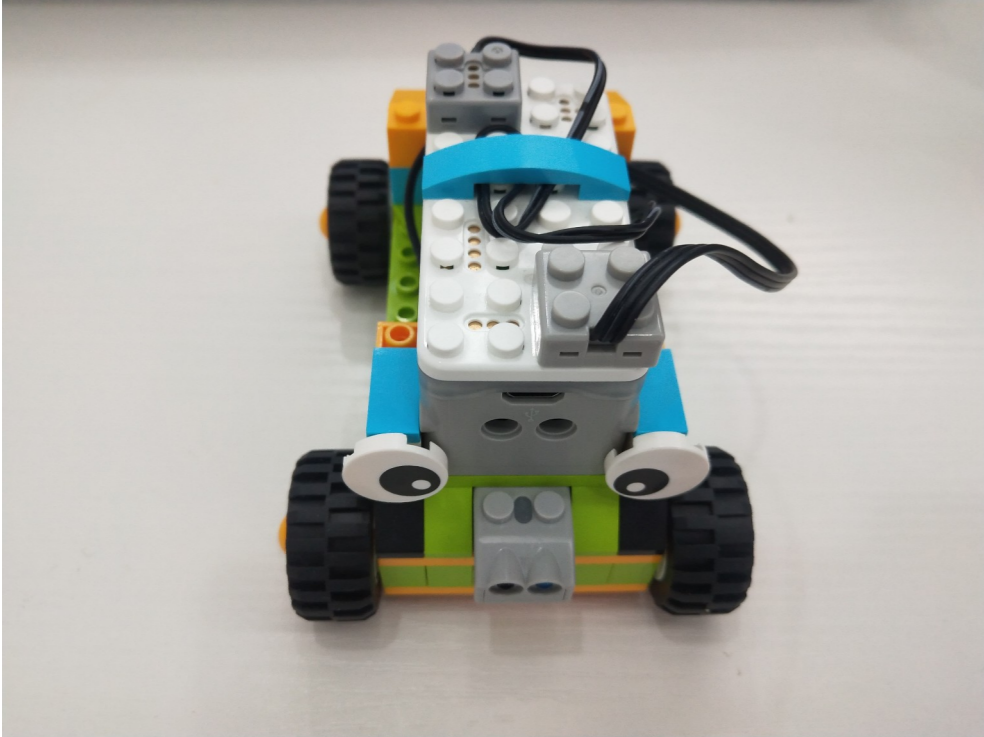
5

Consolidate and extend





- 1 Get to know the scratch3.0 programming page and learn basic operations.
- 2 Learn modules **"when  clicked"** 、 **" Move module"** 、 **" wait"** 、 **" motor stop"** 、 **" Light module"** 、 **" sound"** .
- 3 Comprehensively apply the learned modules to complete programming projects and expand.



Project Discussion

- 1. Let the car move forward.**
- 2. Let the car move forward for 4 seconds.**
- 3. Let the car move forward for 4 seconds and then stop.**
- 4. Let the car stop and turn on the red light.**
- 5. Let the car turn on the light and make sounds.**



Course

Program V2

Kit



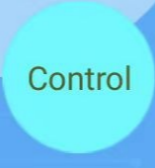
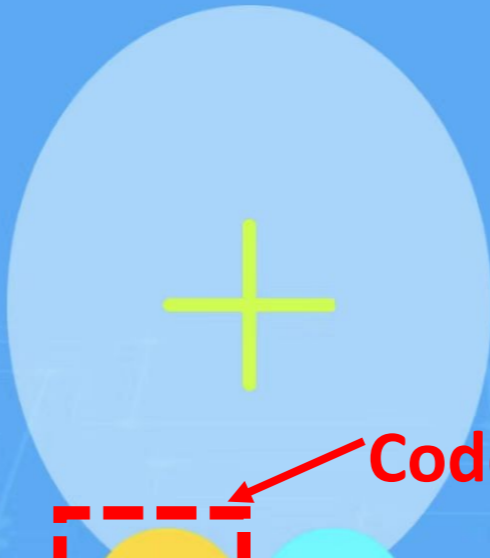
1.New

Create

1. Basic

2. Mechanical

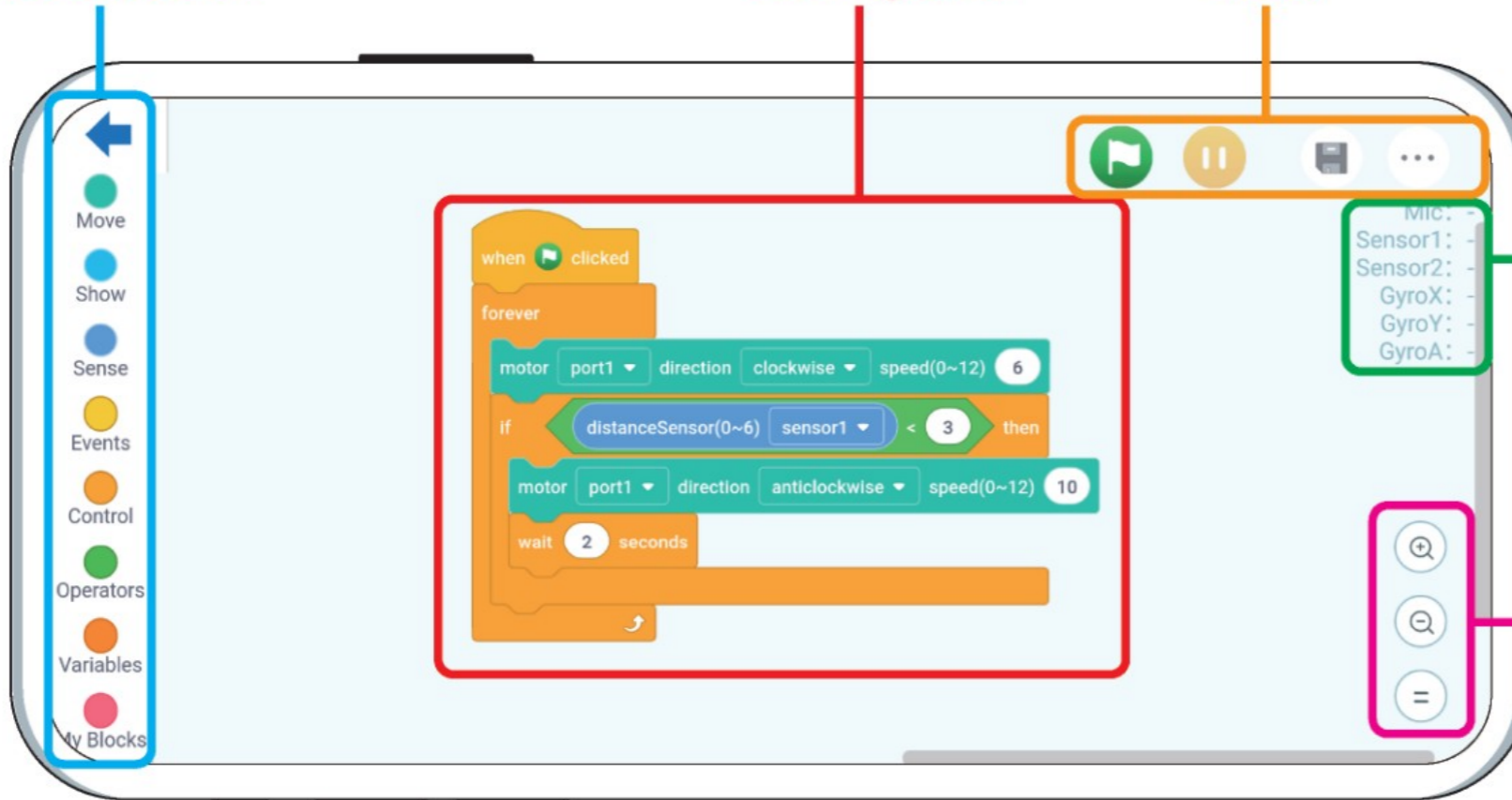
3. YL Corps



Bluetooth connection

Code Area

Module area

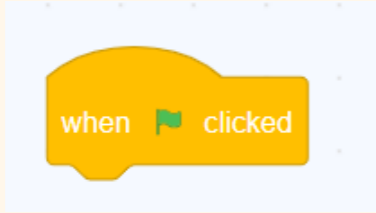




Data area

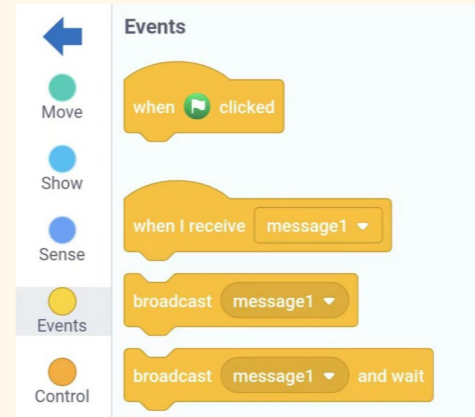
View area

1. Let the car move forward.

1. learn the module when  clicked




When  clicked, it serves as an instruction to start each program. Click the  runs the program we wrote.

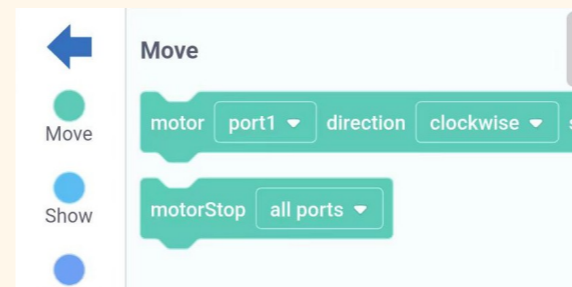


You can find it in the "Events" module.

2. Let the car move forward and learn the move module



Click  and the car will start running!



You can find it in the "Move" module.

2. Let the car move forward for 4 seconds.

1. Wait for 1 second

A Scratch 'wait' block with the number '1' in a white circle and the text 'seconds'.

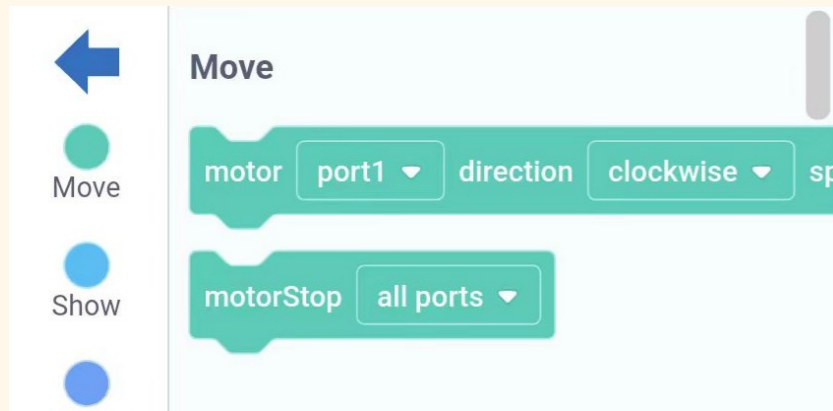
In sequential execution, waiting means the interval between the previous instruction and the next instruction.

2. Think about it, how should this be set up?



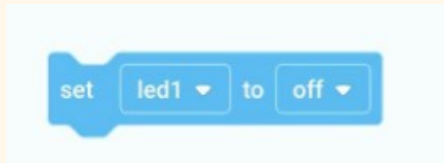
2. Let the car move forward for 4 seconds.

3. How to stop the car?

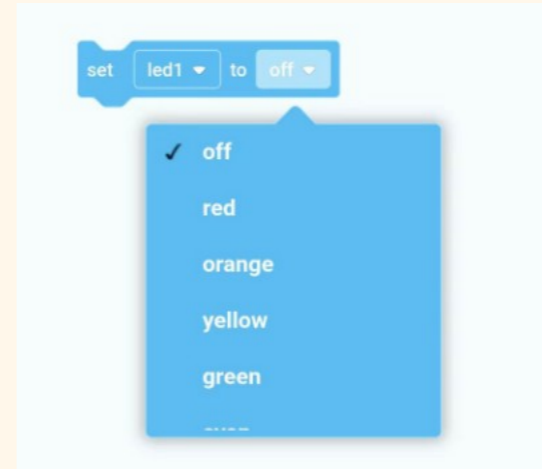


3. Let the car stop and turn on the light.

1. Use of the lights

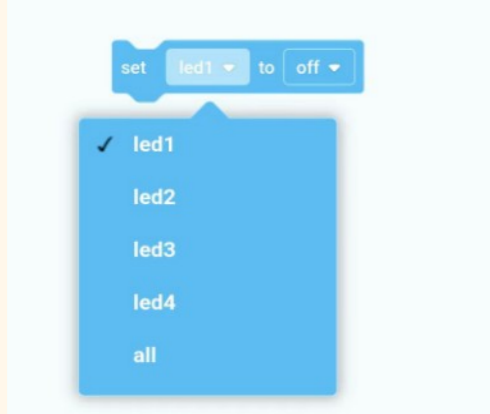


In sequential execution, “wait” means the interval between the previous instruction and the next instruction.



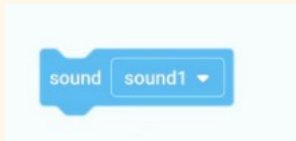
Click the ▾ to select the desired color

2. Why is there only one light on?

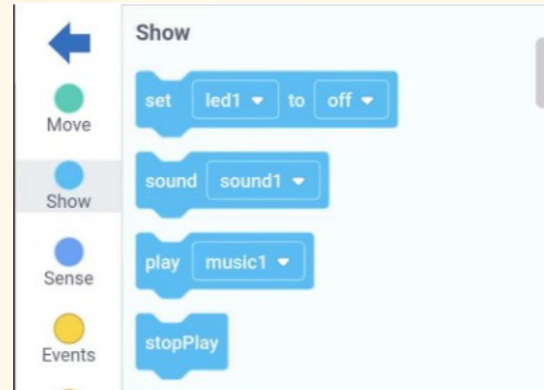


4. Let the car turn on the light and make sounds.

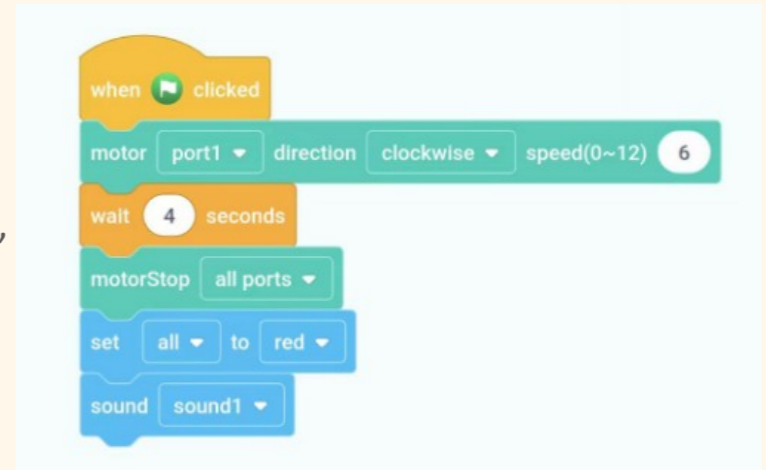
1. Use of the sounds



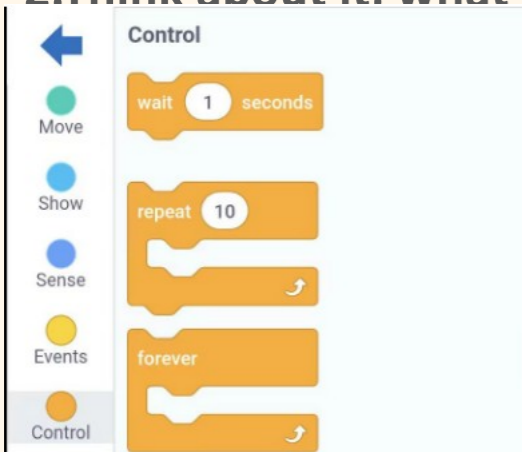
Sound is shorter than music



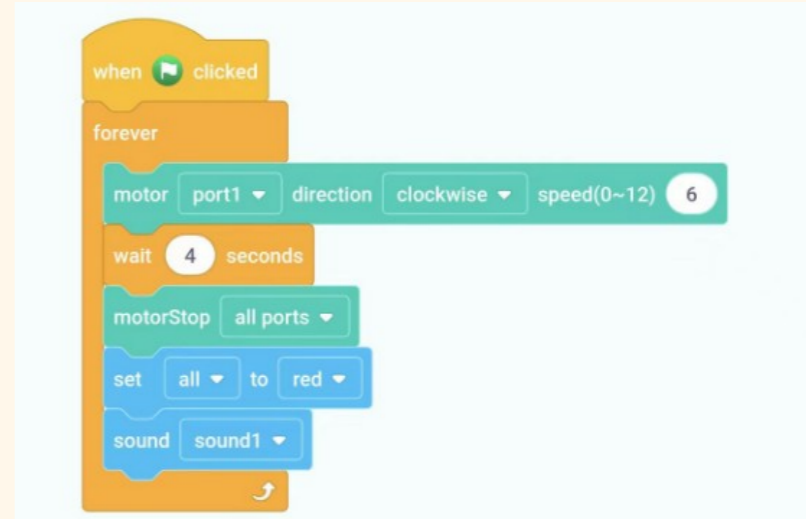
Find it in "Show" module



2. Think about it. what if you need the program to continue?




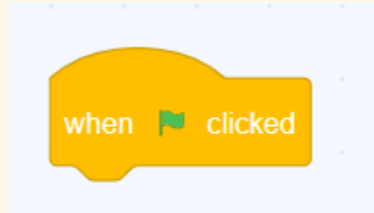
Find the "repeat" in the "Control" module





Have a try

1.Function: After clicking the , let the host controller turn on the blue light and make sound 1, then let the car start to move forward for 6 seconds and then stop.



1

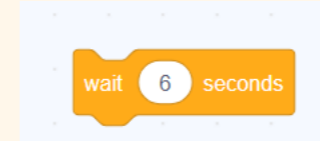
2

3

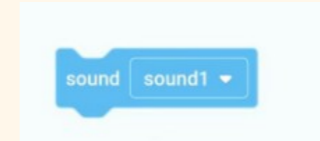
4

5

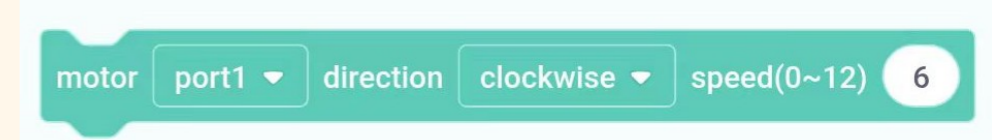
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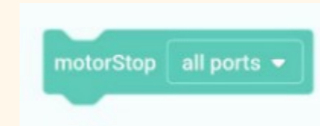
2



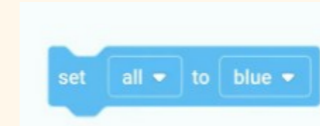
3

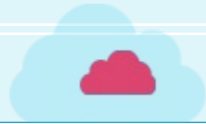


5




1





Have a try

1.Function: After clicking  , let the car start to move forward and turn on the green light for 5 seconds. Then let the car stop running and make sound 1.

when  clicked

1

2

3

4

5

3

wait 6 seconds

5

sound sound1

1

motor port1 direction clockwise speed(0~12) 6

4

motorStop all ports

2

set all to green



Consolidate and extend

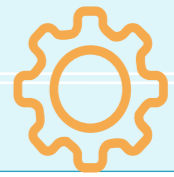
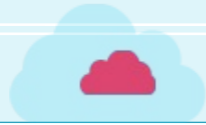


Q &
A

Q1 : Alex programmed the car but the lights did not turn on. What happened?

```
when clicked
  forever
    motor port1 direction clockwise speed(0~12) 6
    wait 6 seconds
    motorStop all ports
    set all to off
    sound sound1
```

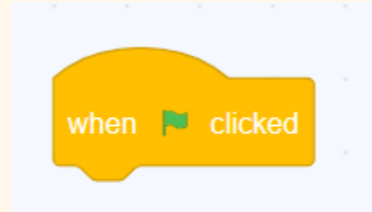
A1 : All lights are trun off.





Knowledge Review

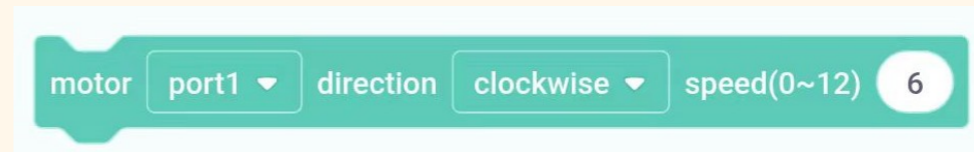


(1)

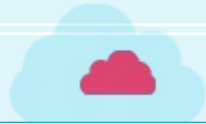


When  clicked, it serves as an instruction to start each program. Click the  runs the program we wrote.

(2)



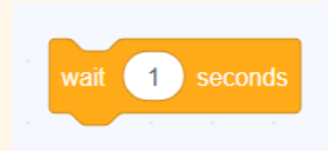
Motor clockwise and counterclockwise control



Knowledge Review



(3)



The programs are executed sequentially, with a waiting time interval between two programs.

(4)

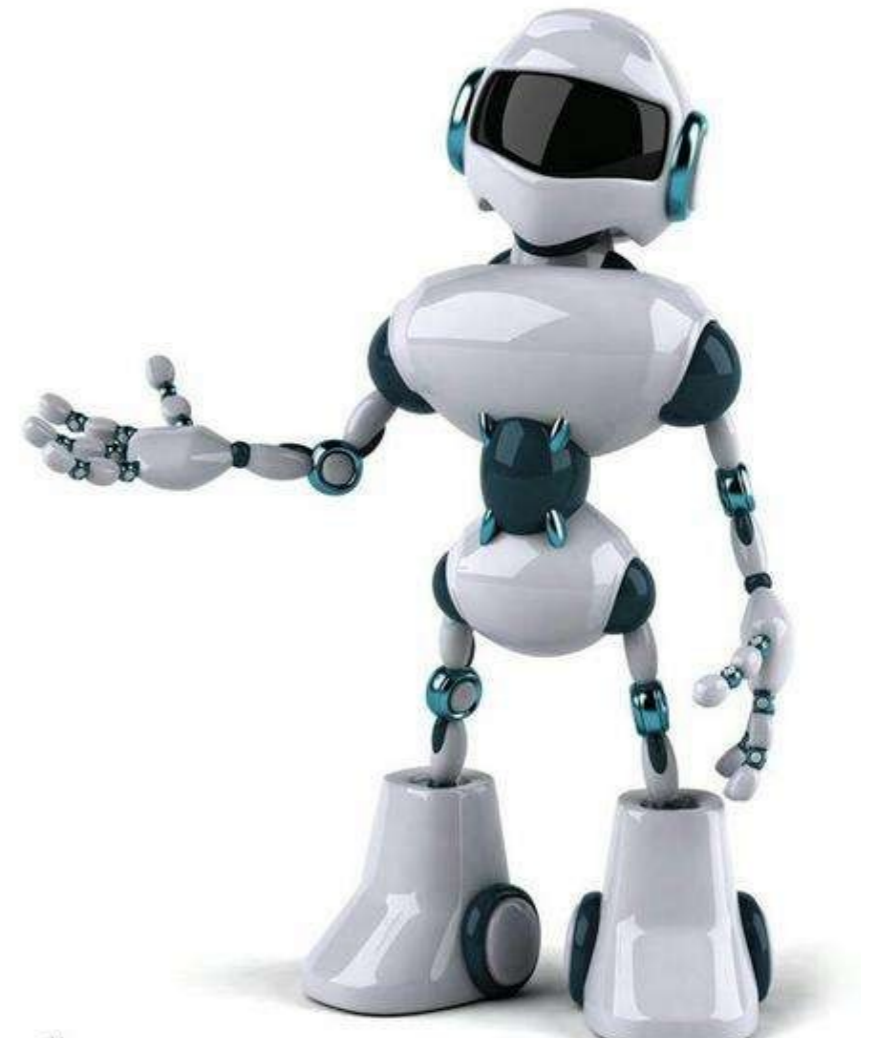


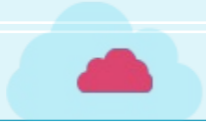
Repeat the program inside and never stop.

Alex wrote such a program for the car, but the car stopped very quickly. Why? ()

```
when clicked
  forever
    motor port1 direction clockwise speed(0~12) 6
    wait 1 seconds
    motorStop all ports
    set all to off
    sound sound1
```

- A** The car is angry **B** Motor operation program error
C Time is too short **D** The time position is wrong

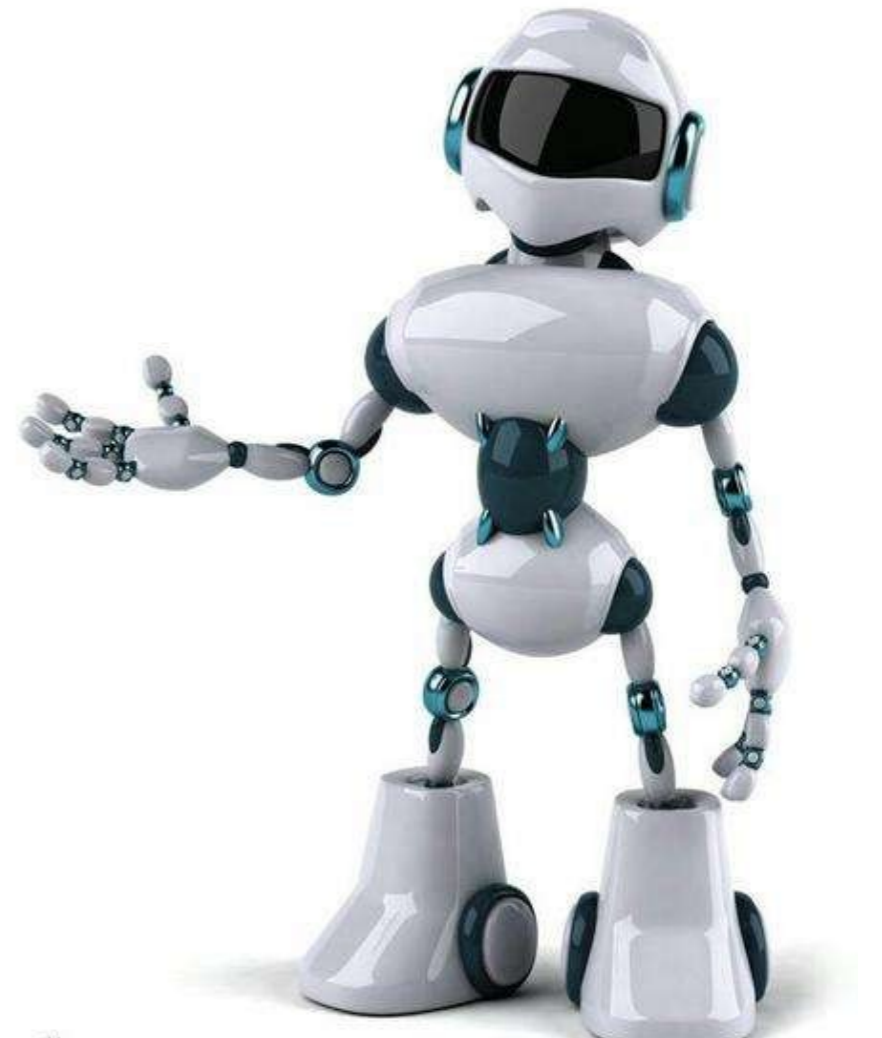




Answer : **C**

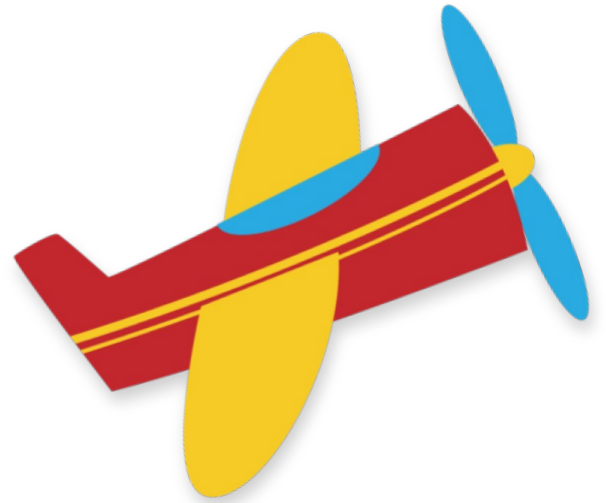
Analysis : **Because the motor runs for such a short time, it stops very quickly.**

```
when clicked
  forever
    motor port1 direction clockwise speed(0~12) 6
    wait 6 seconds
    motorStop all ports
    set all to off
    sound sound1
```





Talk





THANKS

