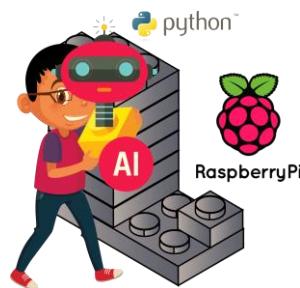


CodePai Curriculum A1.2



A place for Fun, Play and STEM education

A1.2 Explore CodePai Island

Course Objective

- Understand the basic of graphic coding
- Understand the angle, variables, logical operation and loop
- Understand what actually controls the experiment object
- Spark the audience on what application could be invented based on known components

Course Content

- Blocky coding introduction
- Demonstrate features
- Conduct user experience on demonstrated features

CodePai Island

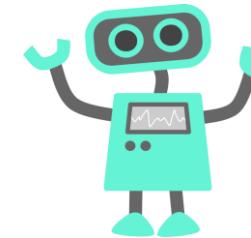
Explore CodePai Island



1 Learn how to drive me

2

Ride me around



Hello master, welcome to CodePai Island. In today's lesson, I will take you to the adventure of CodePai Island. You will



3

Help Sam to find worm and way home

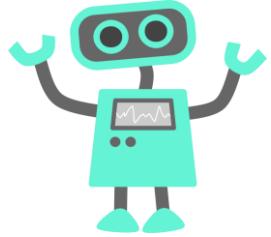


4

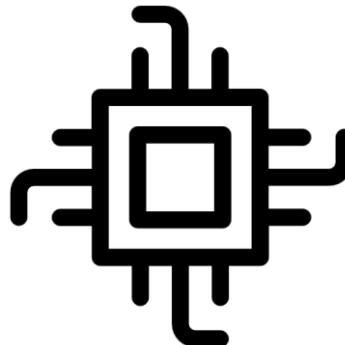
Drive me to Campsite

A1.2.1 Learn how to drive me

User Interface and Chip Introduction



Hello master, drive me is easy. Just tell me what I should do.
But I am different to human beings. I only accept the command from coding.....
Try me now....



1010100010

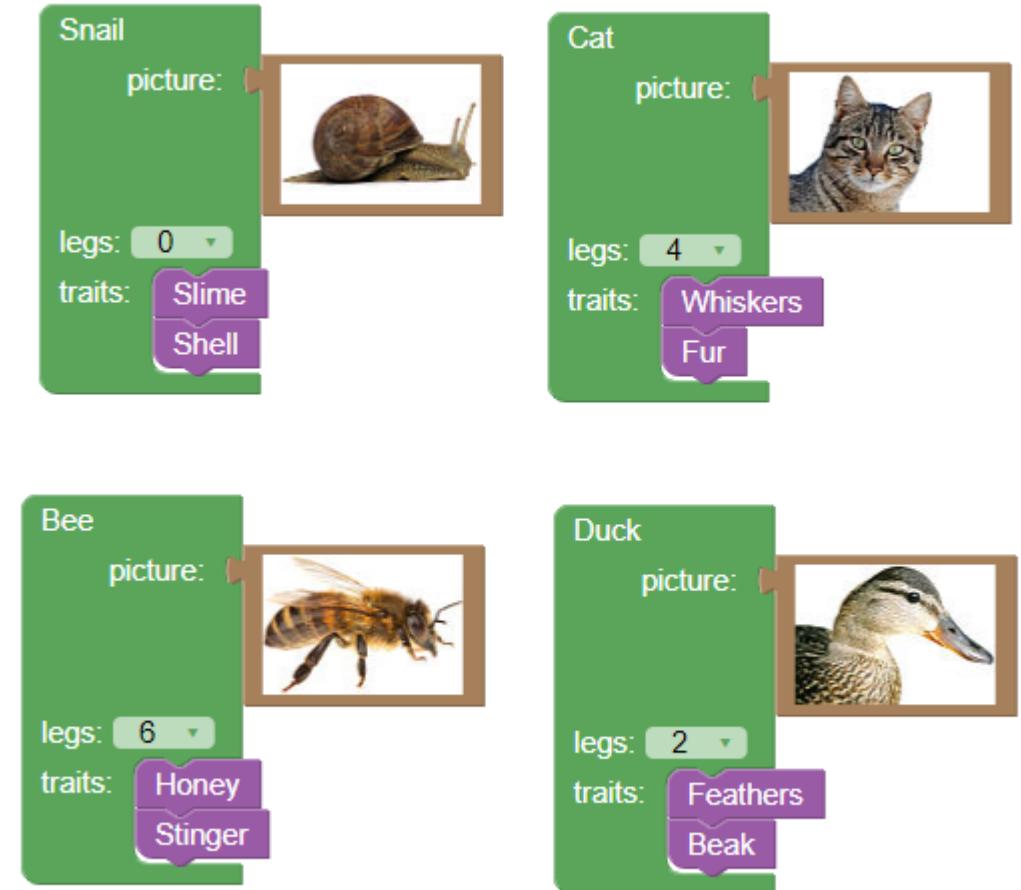
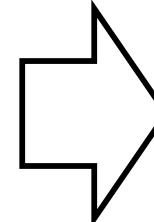
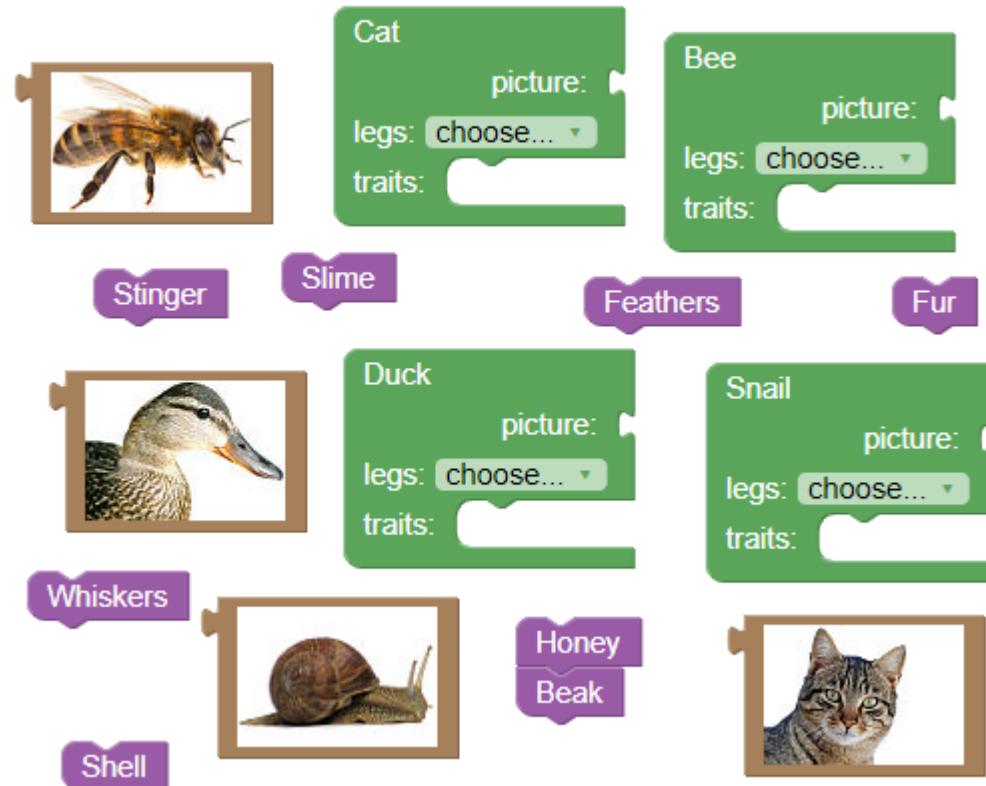


A1.2.1 Learn how to drive me

Blocky-Games Introduction

<https://blockly-games.appspot.com/?lang=en>

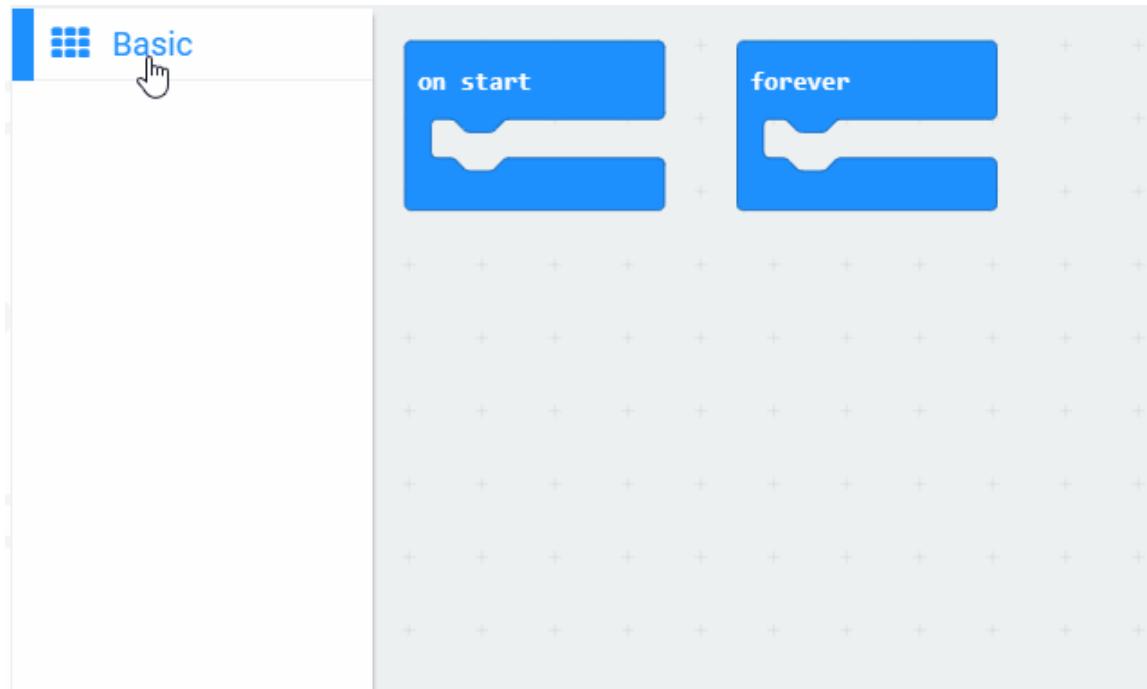
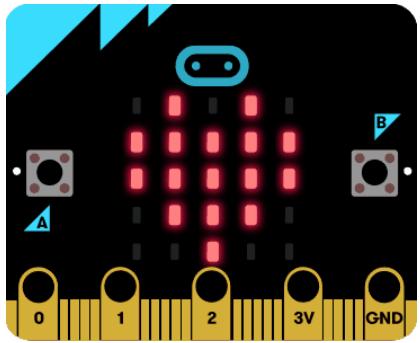
Make your Puzzle!



A1.2.1 Learn how to drive me

Blocky-Games Introduction

Do you still remember our first class? Make my heart beat!

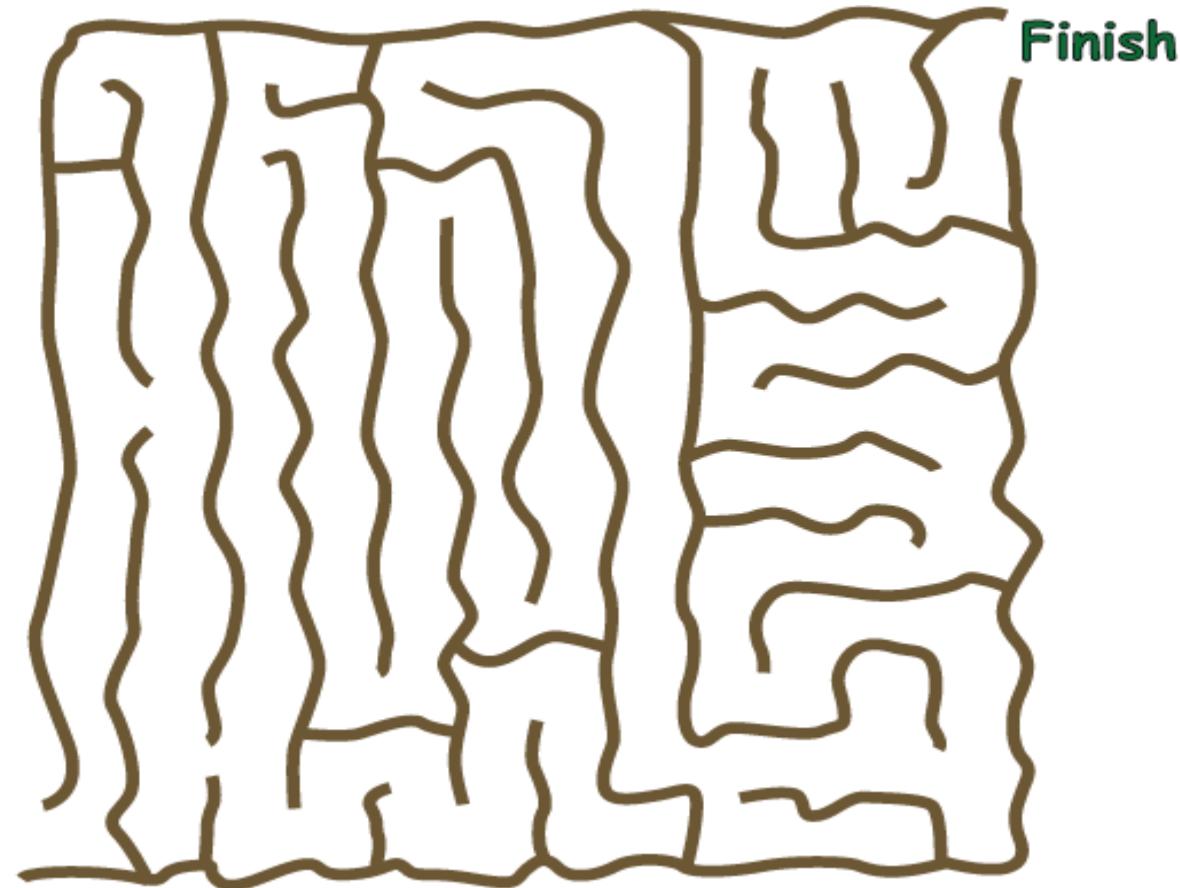


A1.2.2 Ride me around

Blocky-Games Introduction

See, you already learnt how to drive me. Ride me now!

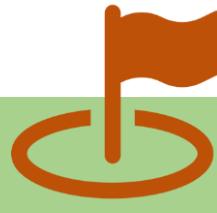
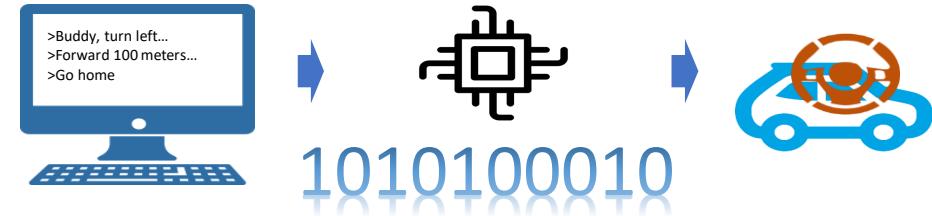
What do you see?
Yep, a maze!
Can you work out?



A1.2.2 Ride me around

Blocky-Games Introduction

Now it is your turn to lead me find way out! Remember how to drive me? I only understand 101010....



Move Forward

Turn Right 90 Degree

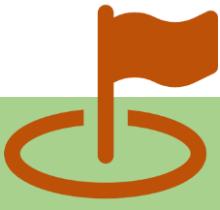
Turn Left 90 Degree

```
move forward
turn left ⌂
move forward
turn right ⌂
move forward
```

A1.2.2 Ride me around

Blocky-Games Introduction

Now you have more option on Repeat Until command, try me!



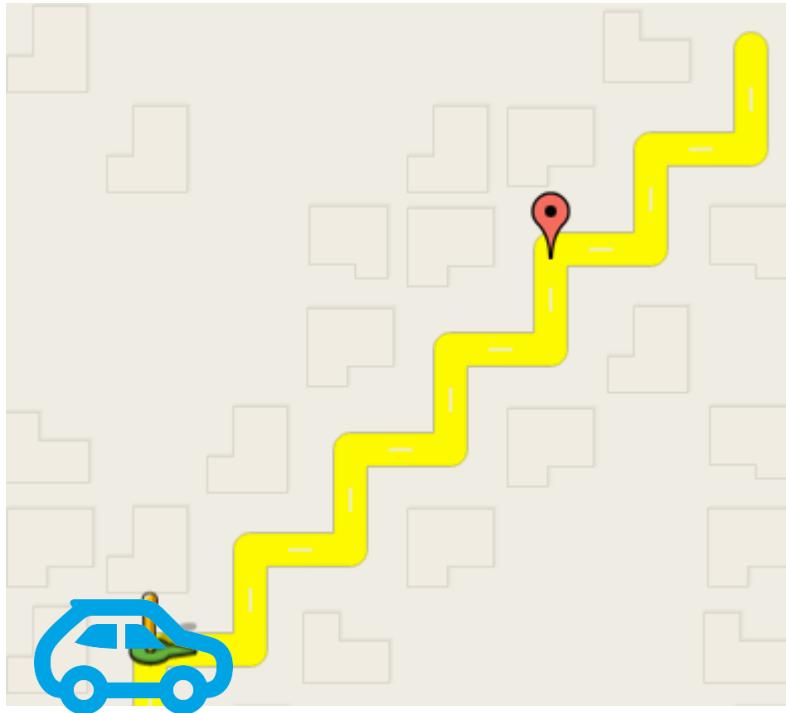
Move Forward
Turn Right 90 Degree
Turn Left 90 Degree
Repeat Until

Repeat Until
Move Forward
Turn Left 90 Degree
Move Forward
Turn Right 90 Degree

A1.2.2 Ride me around

Blocky-Games Introduction

That's right! You can repeat doing thing until you reach the target!



Move Forward

Turn Right 90 Degree

Turn Left 90 Degree

Repeat Until

Repeat Until



Move Forward

Turn Left 90 Degree

Move Forward

Turn Right 90 Degree

A1.2.2 Ride me around

Blocky-Games Introduction

Challenge!

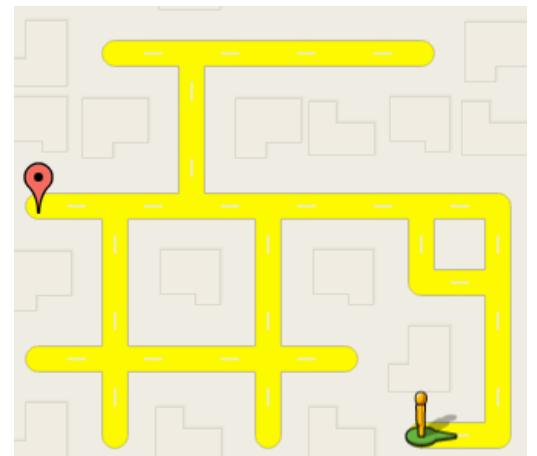
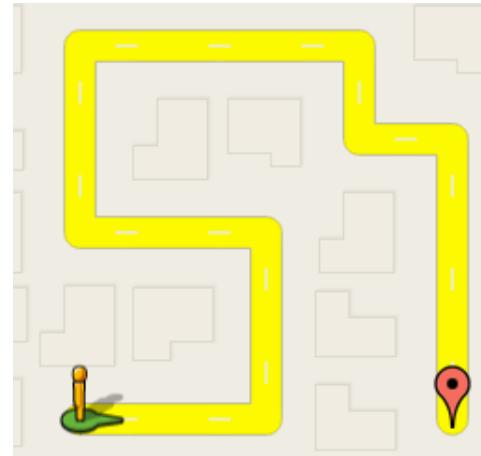
move forward

turn left 5°

turn right 5°

Try more!

if path ahead
do
else



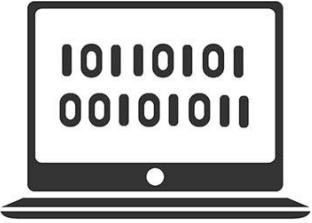
```
repeat until [ ]  
do [ if path ahead  
do move forward  
if path to the left 5°  
do turn left 5° ]
```

```
repeat until [ ]  
do [ if path ahead  
do move forward  
if path to the right 5°  
do turn right 5° ]
```

```
repeat until [ ]  
do [ if path ahead  
do move forward  
if path to the left 5°  
do turn left 5°  
if path to the right 5°  
do turn right 5° ]
```

```
repeat until [ ]  
do [ if path ahead  
do move forward  
else [ if path to the left 5°  
do turn left 5°  
else move forward ] ]
```

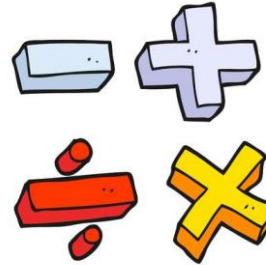
A1.2 Recap



Event: something happened

If-Else: if something happen, Then do something

Action: do something



Angle and calculation

Logical thinking



Chips Language