

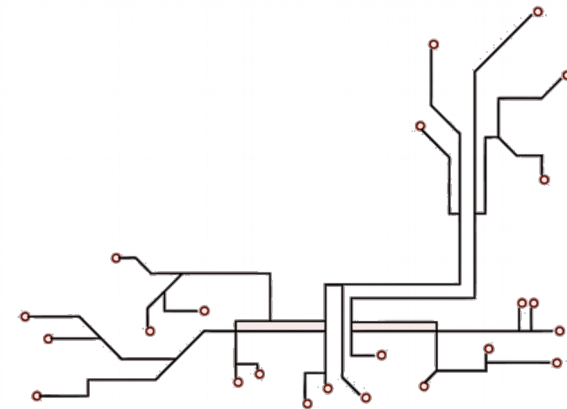
Robotics @ Zhenghua

- What is Robotics?
- What is Mindstorms/EV3
- 2-Wheel Robots
- Robot Educator Build

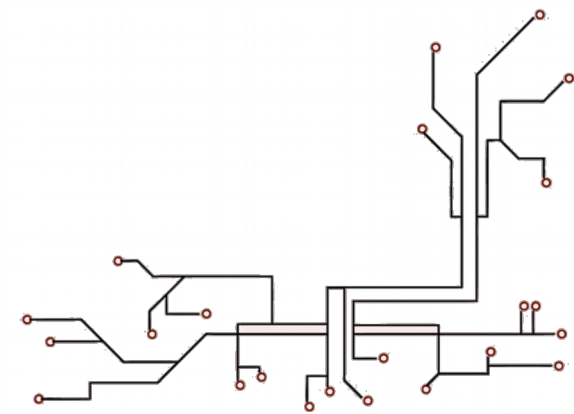
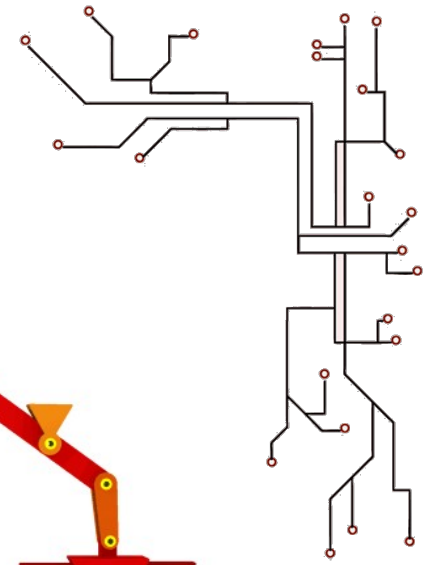
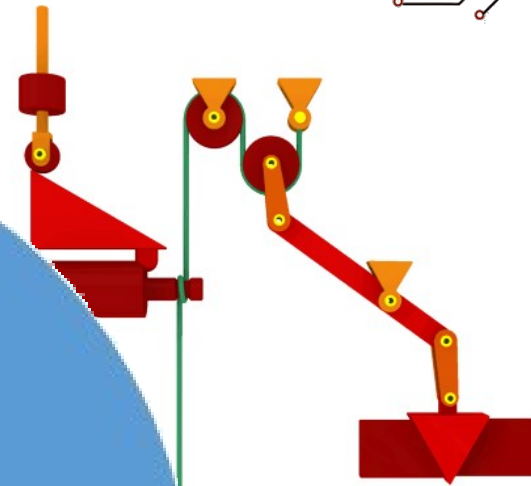
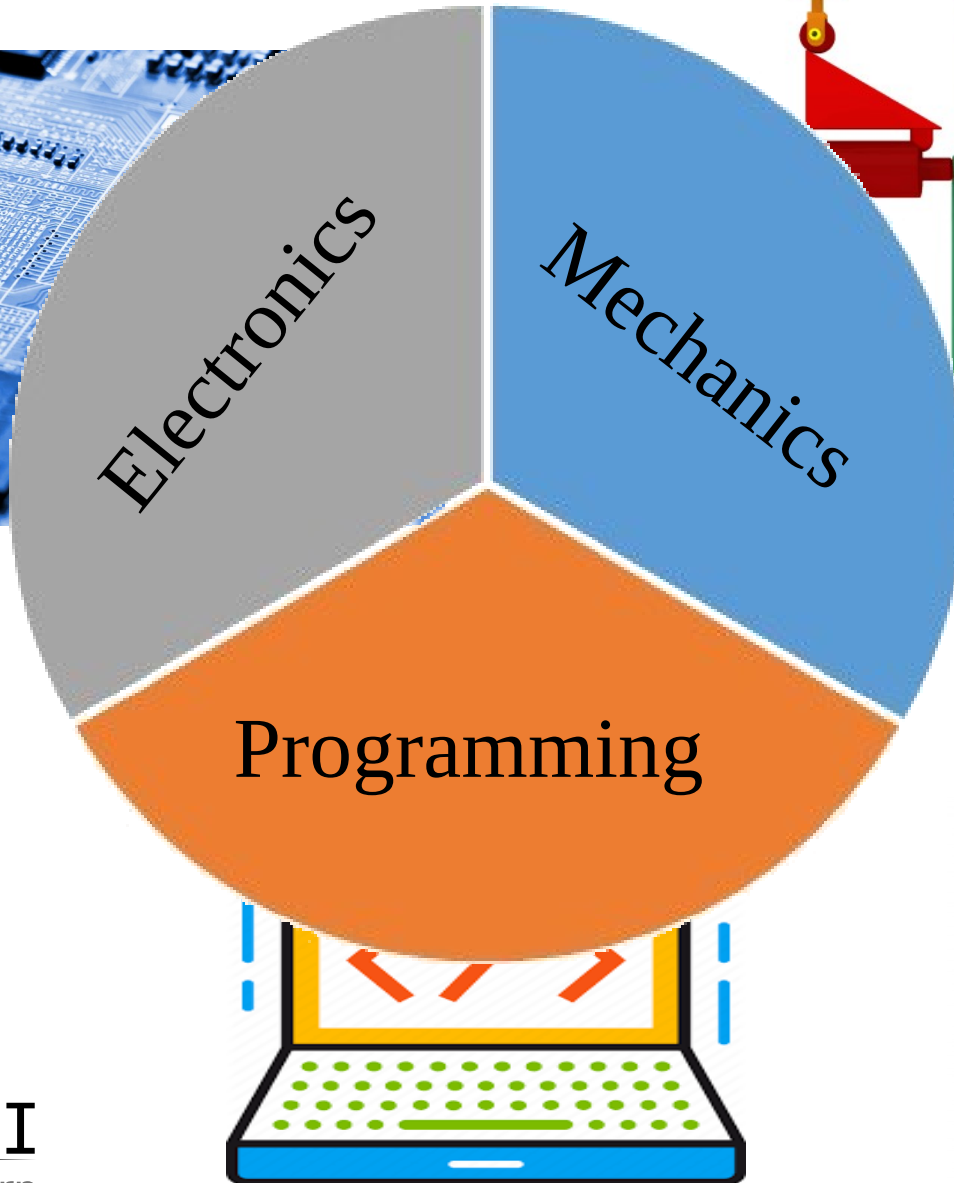
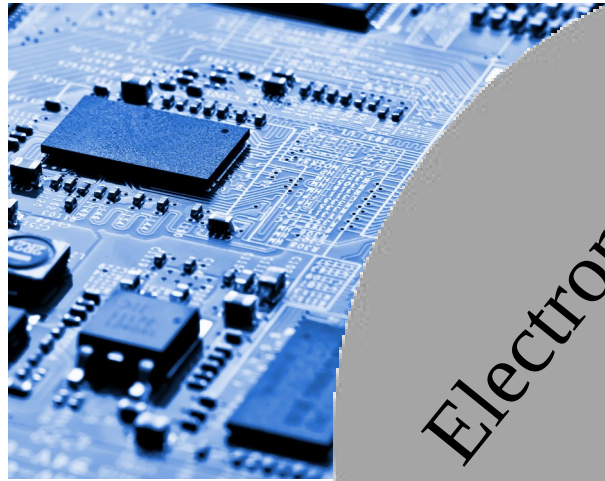


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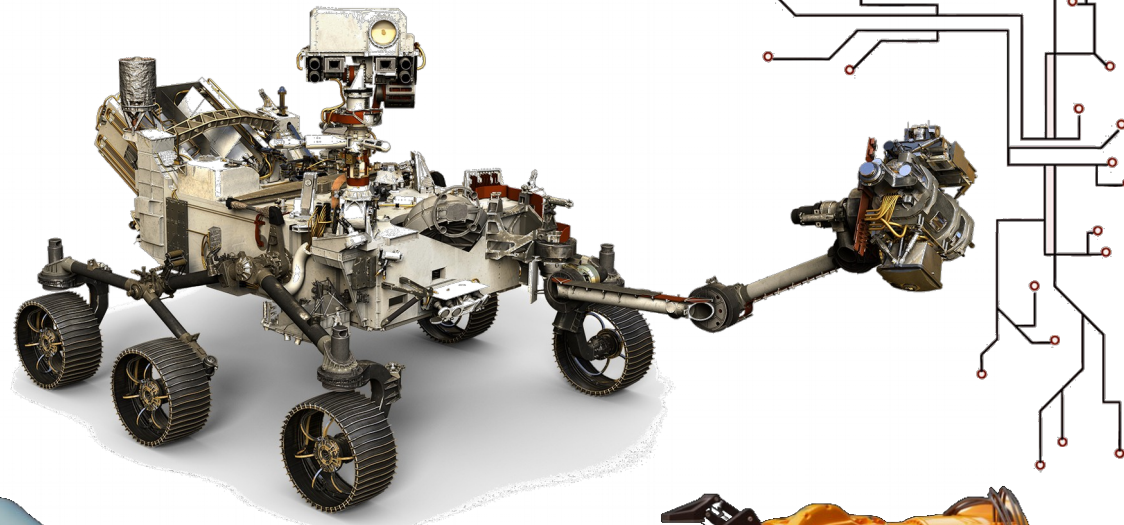
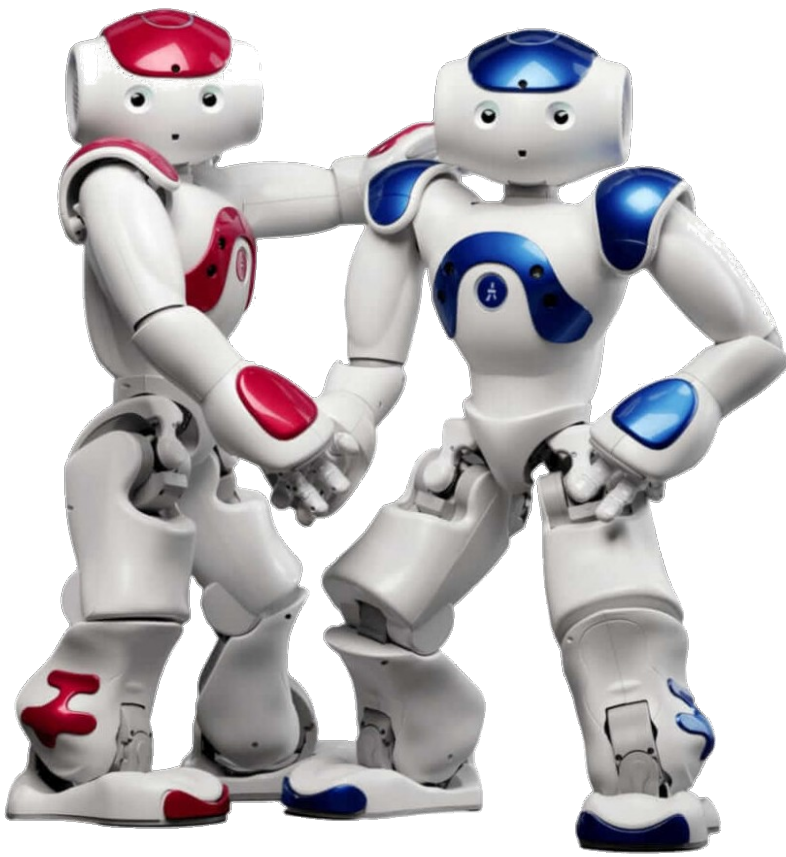
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What is Robotics?



What is a Robot?



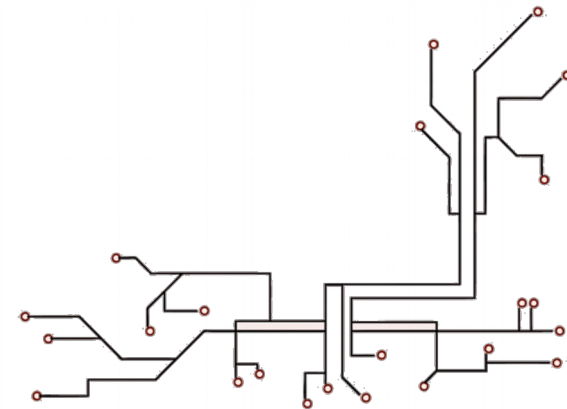
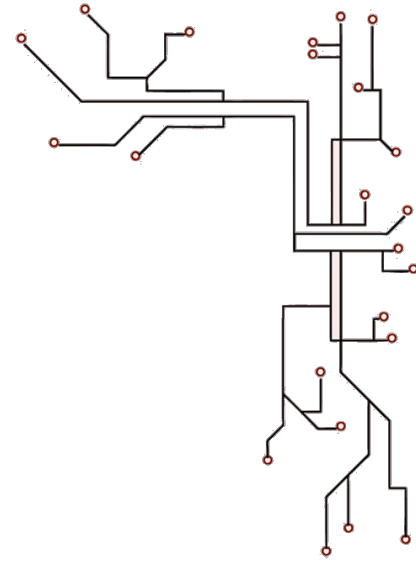
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What is a Robot?

Almost anything automated...

But, physical robots usually have these:

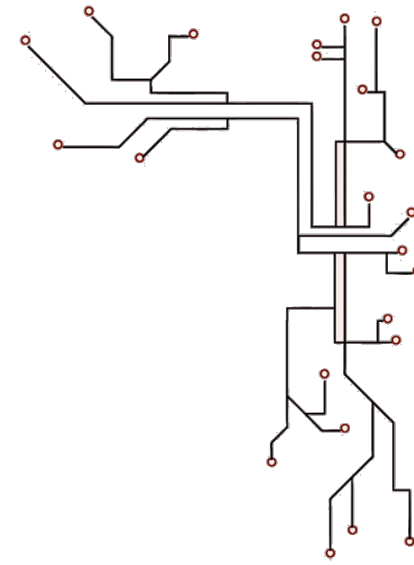
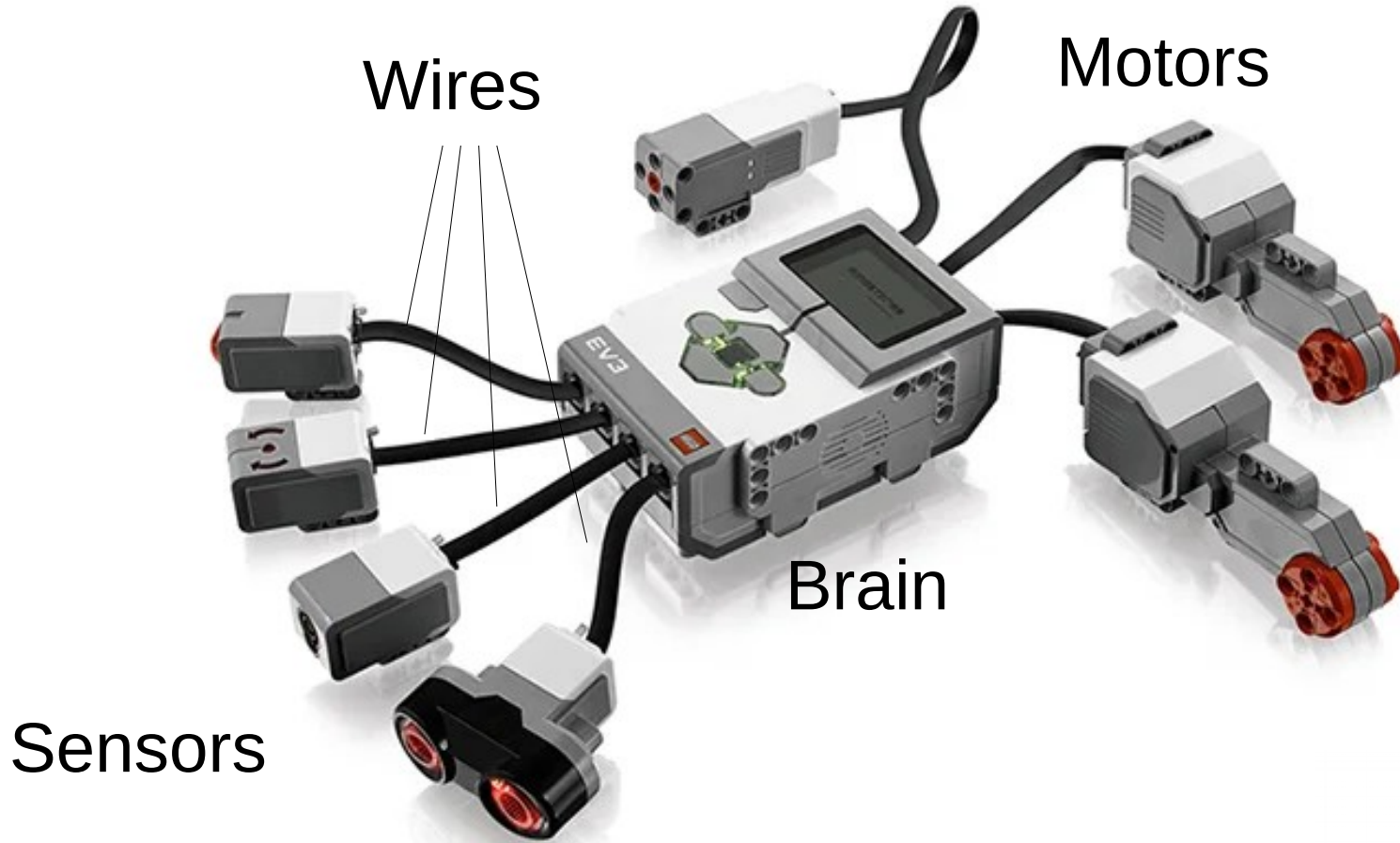
- *Computer Brain*
- *Body / Frame*
- *Motors*
- *Sensors*
- *Wires*



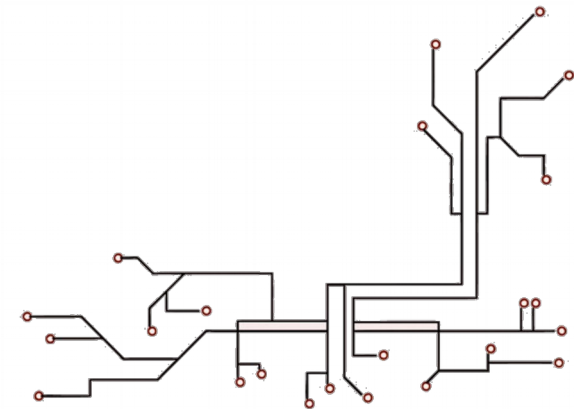
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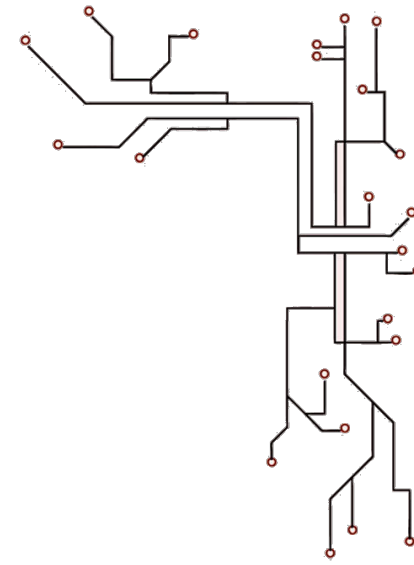
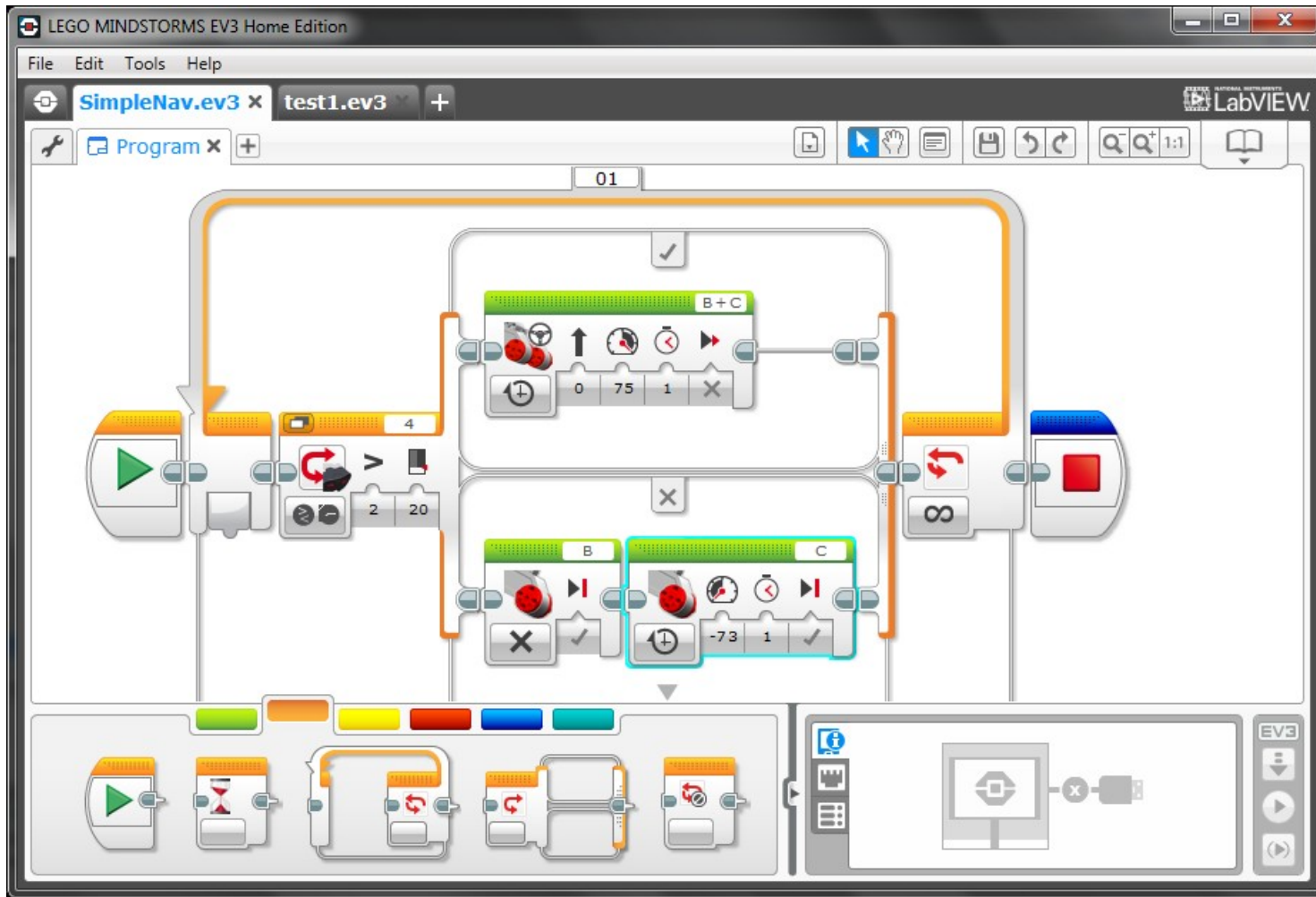
What is Mindstorms/EV3?



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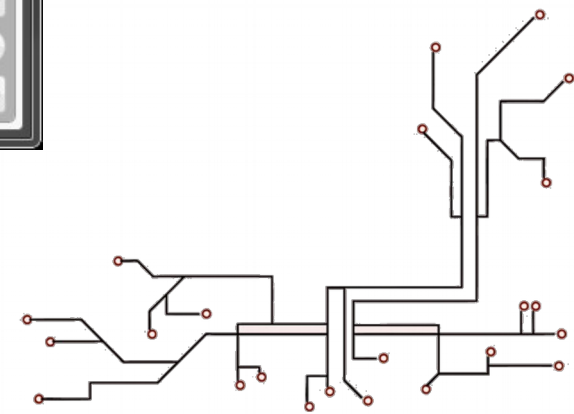


EV3 Programming



Block Programming

- Easy to learn
- Not professional...

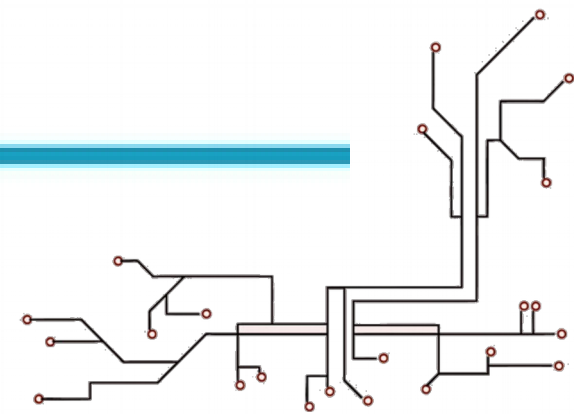
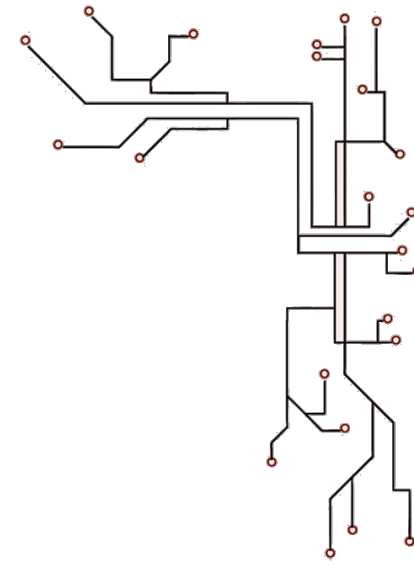
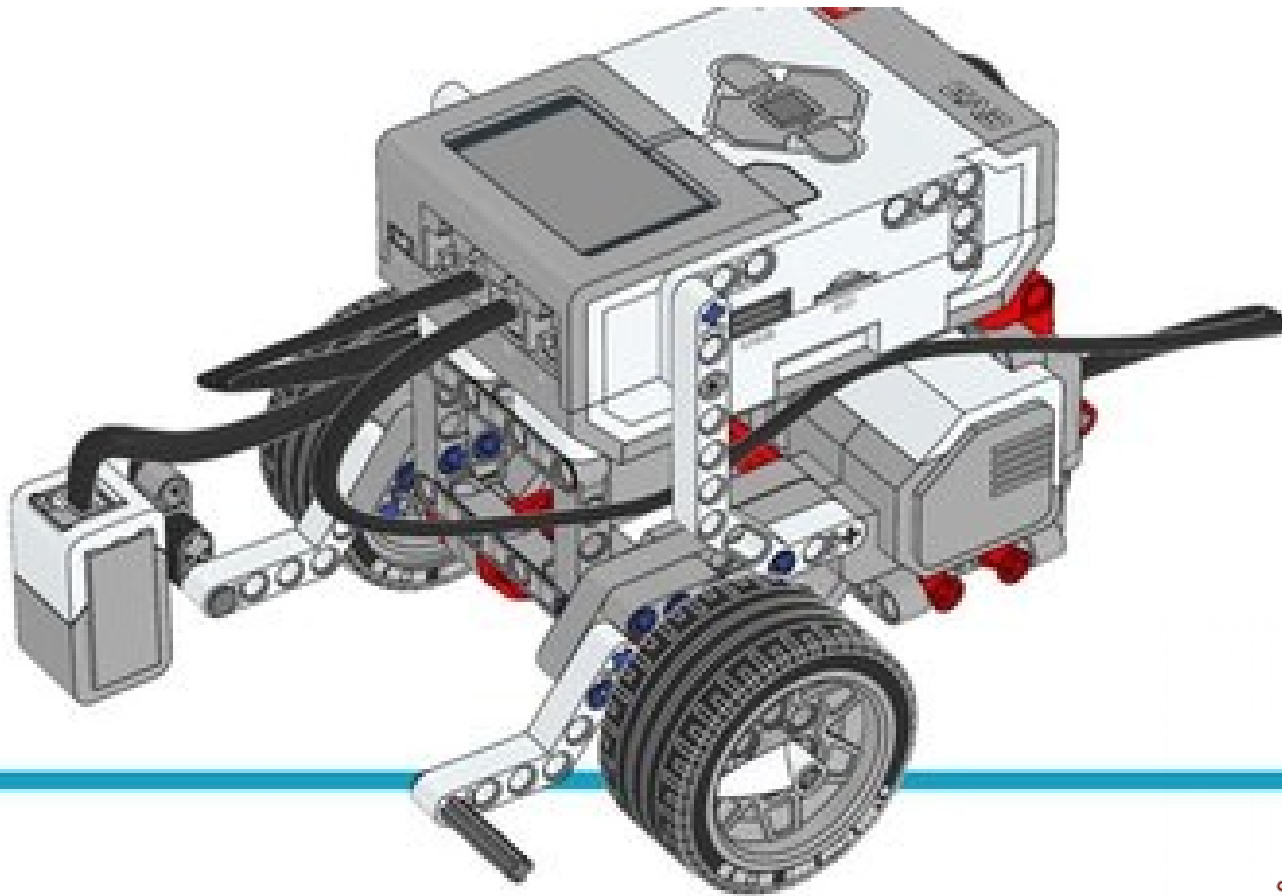


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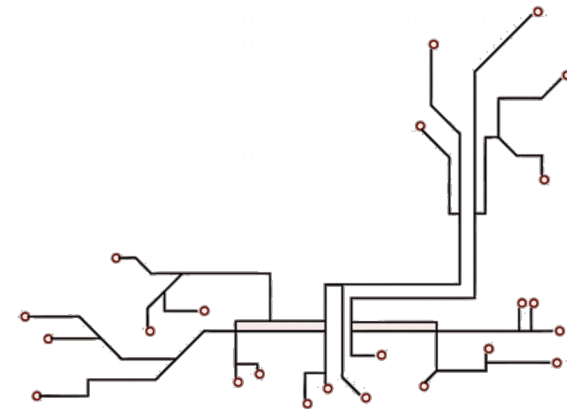
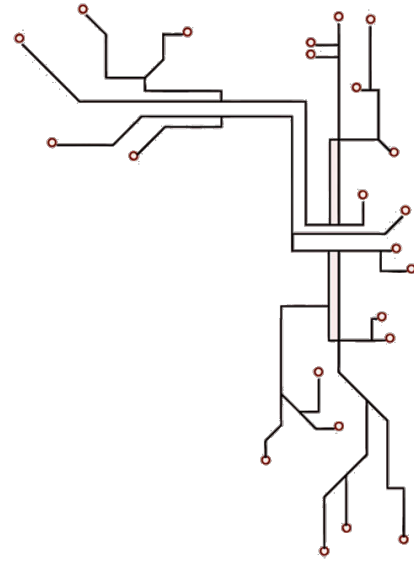
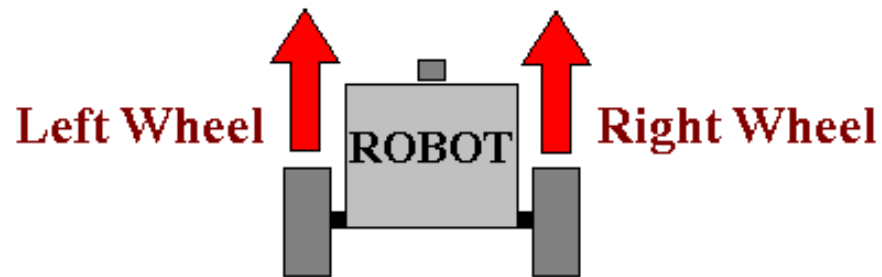
EV3 Robot Educator

2-Wheel Base

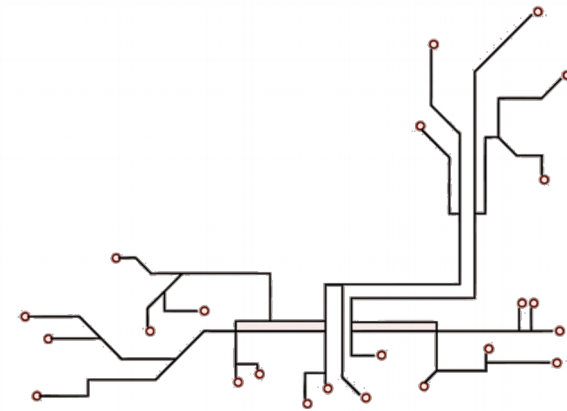
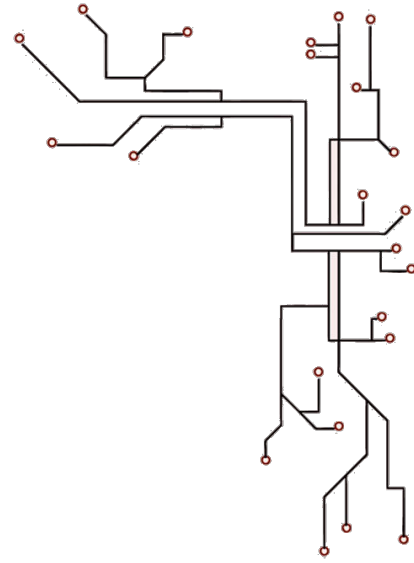
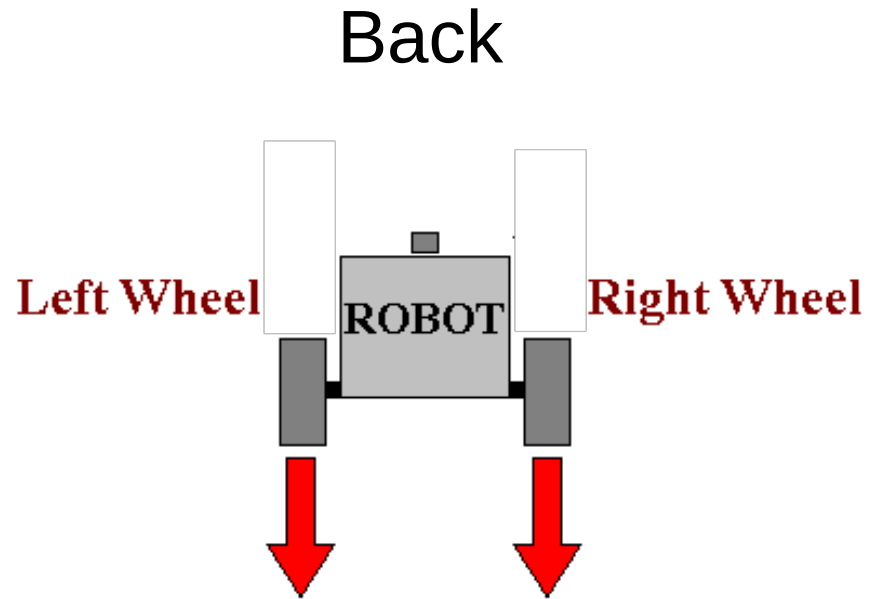


2-Wheel Differential Drive

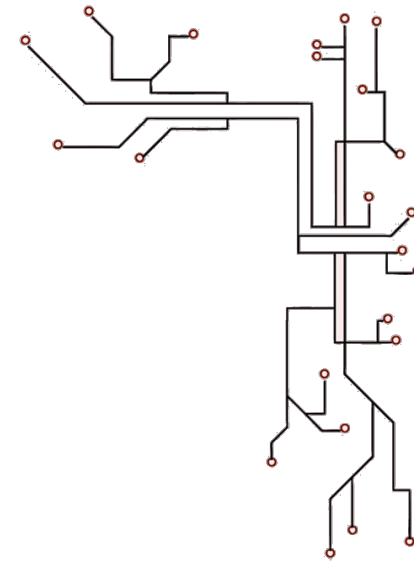
Forward



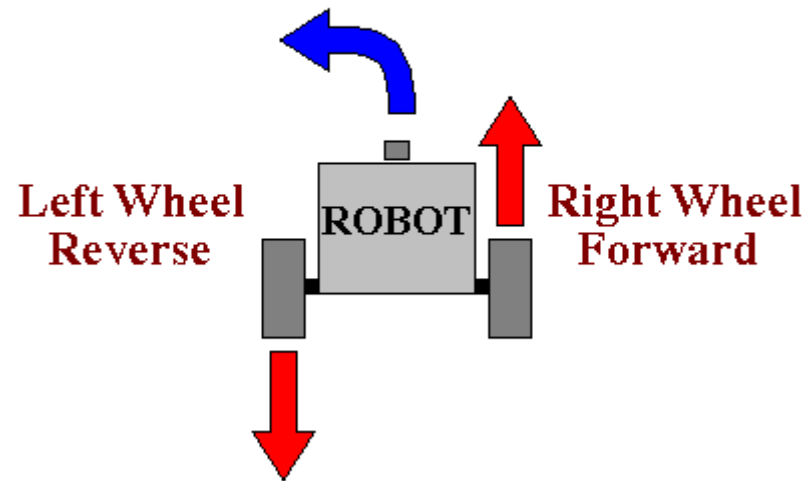
2-Wheel Differential Drive



2-Wheel Differential Drive

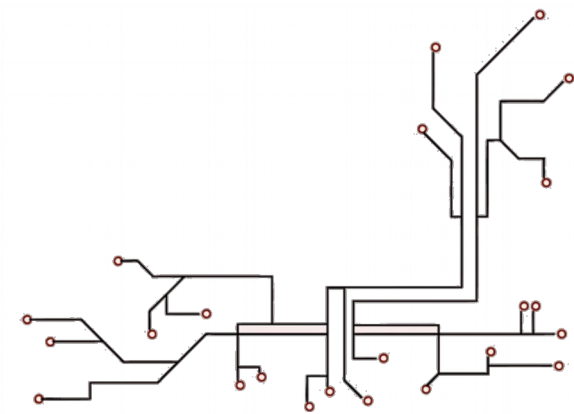


Left Turn



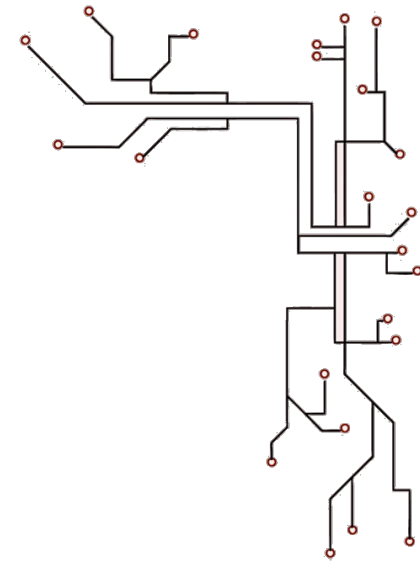
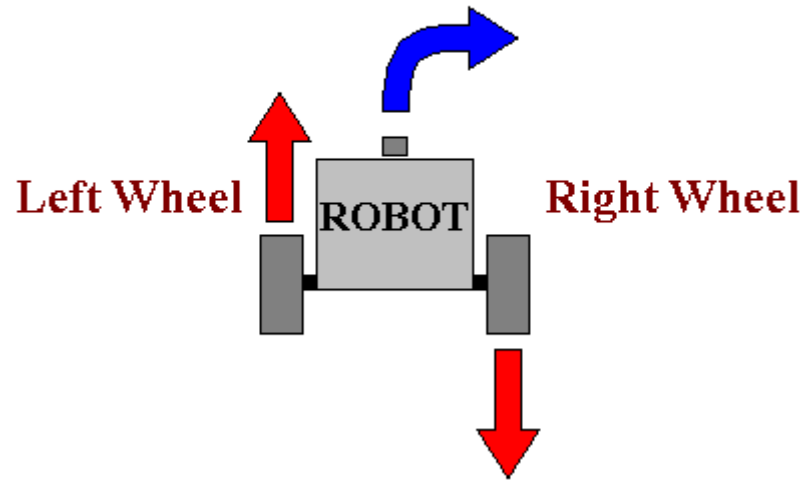
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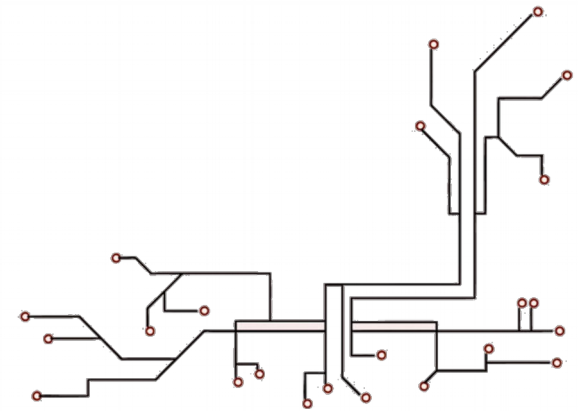
2-Wheel Differential Drive

Right Turn



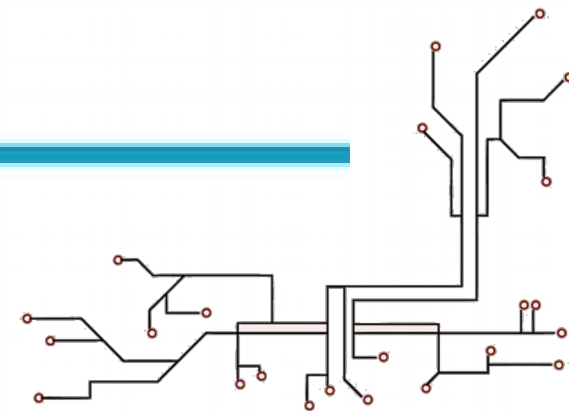
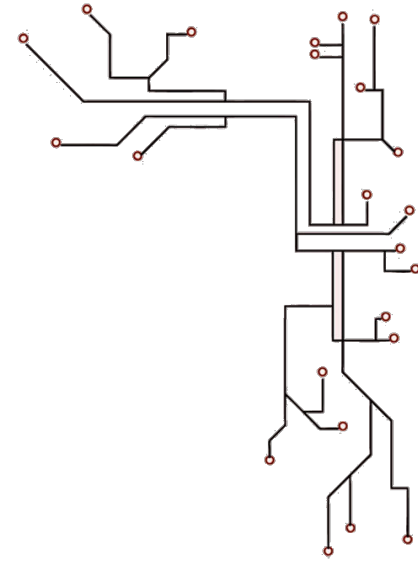
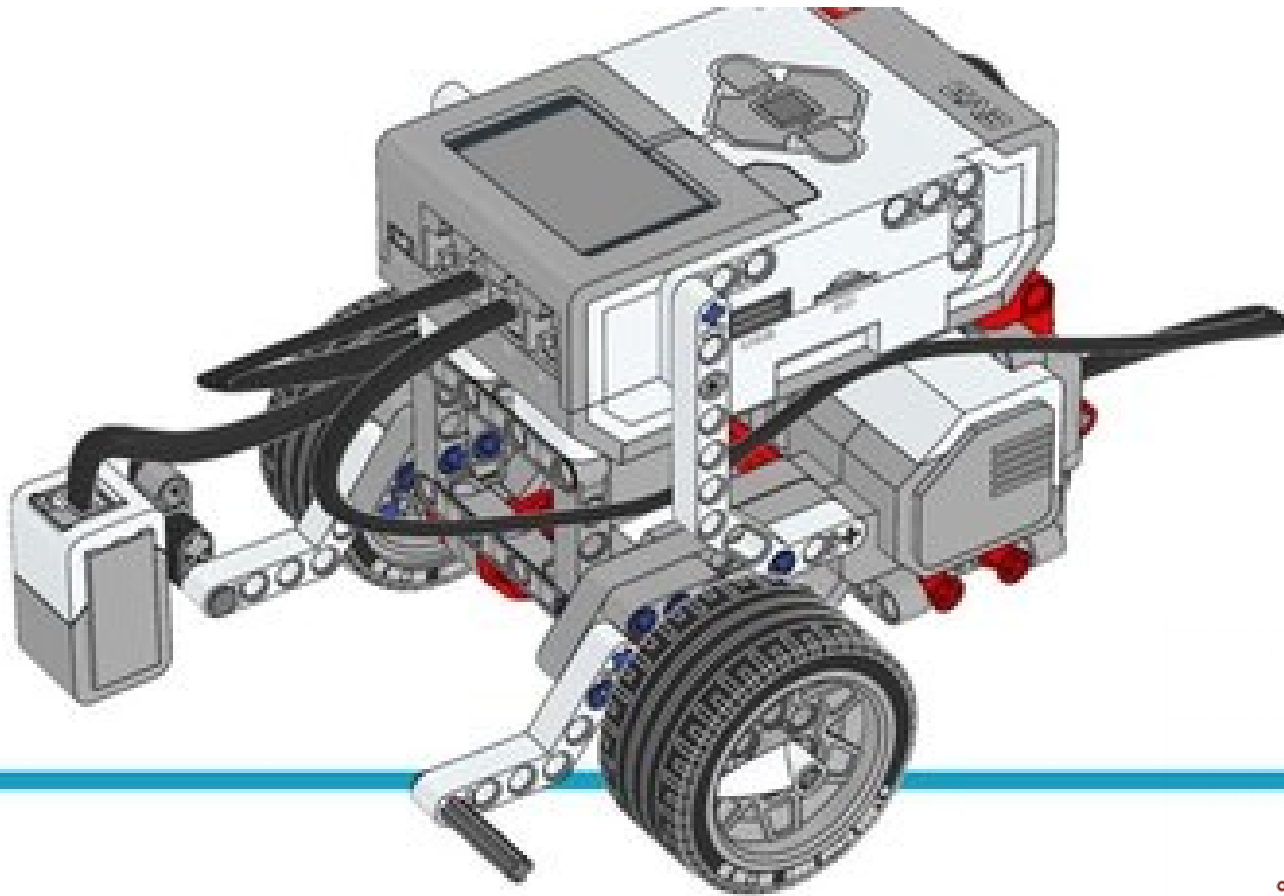
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EV3 Robot Educator

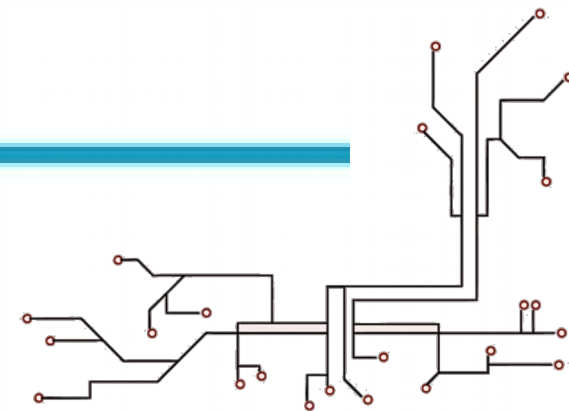
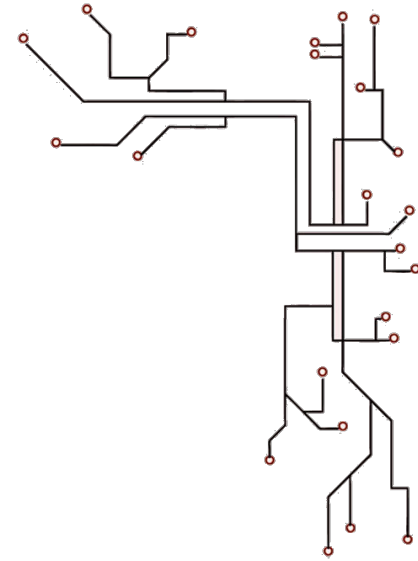
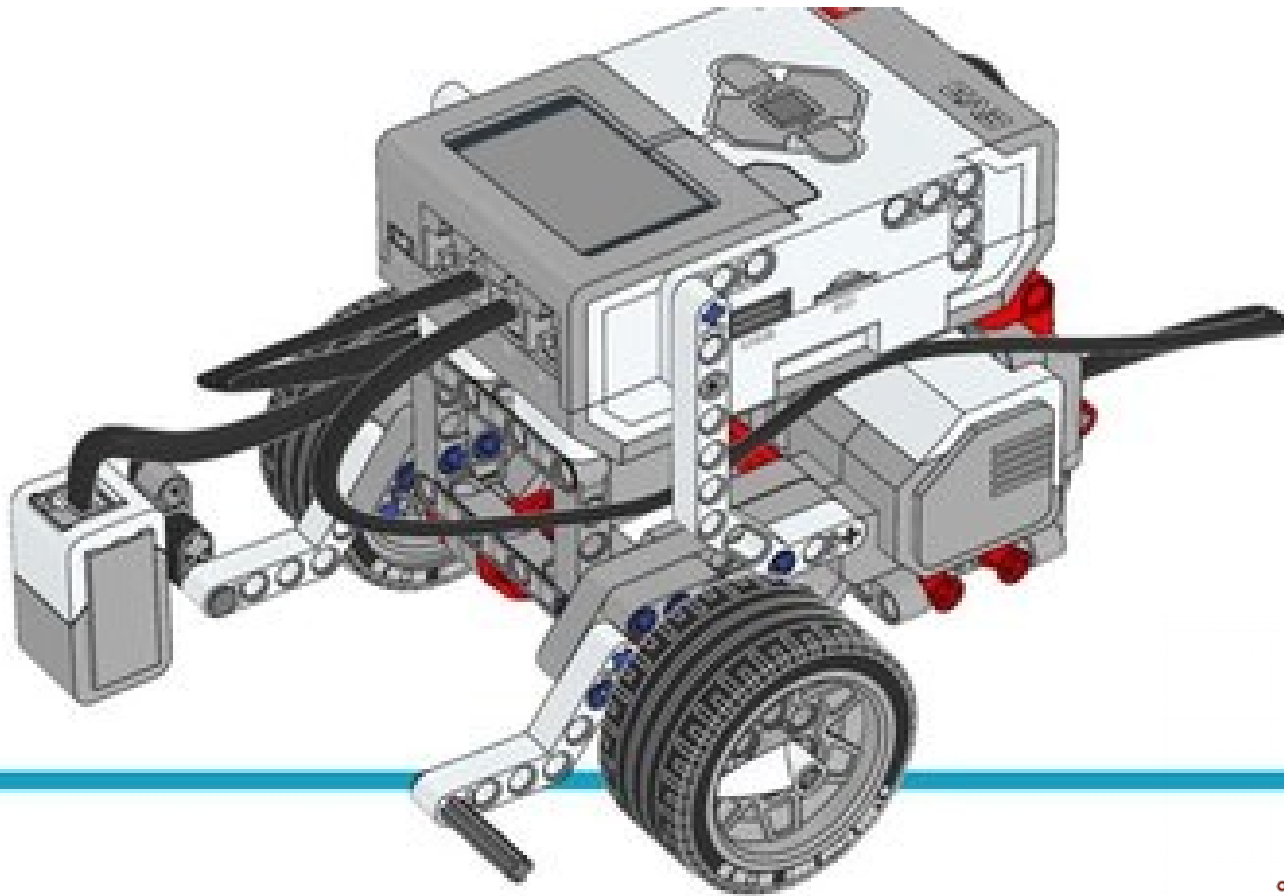
Let's Build!!!



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EV3 Robot Educator

Then Program...



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