#### E10 – Third week challenges – Summer 2022

### Challenge 9 – use VEX IQ ClawBot with sensors (Color sensor) in Challenge Pack

**Traffic Lights Challenge** - program your robot to navigate through the intersections, stopping at any intersection that has red traffic lights



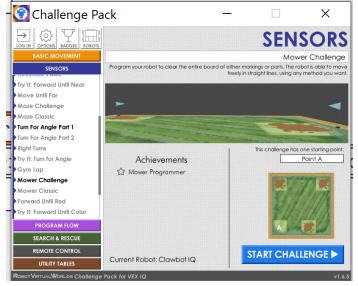


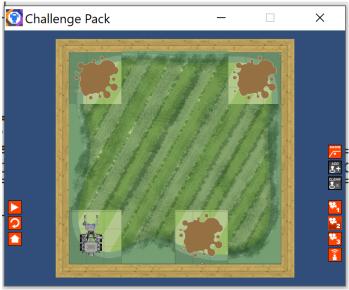
## Challenge 10 – use VEX IQ ClawBot with sensors (Gyro sensor) in Challenge Pack

**Mower Challenge -** program the robot to mow the grass. The robot is able to move freely.

However, there are three mud zones marked on the surface. When the robot enters these zone, the robot will be picked up, then place back down, then resume going through the rest of its program.

Note: In the virtual challenge, the robot will be picked up automatically, then placed back down after a few seconds.





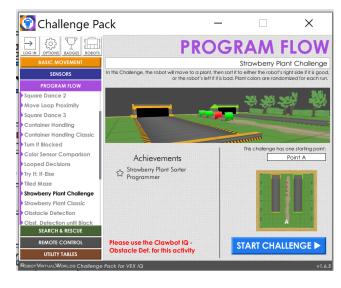
### Challenge 11 - use VEX IQ ClawBot with sensors (Color sensor) in Challenge Pack

**Strawberry Plant Challenge** - For this challenge, use a Loop to program your robot to move a number of objects to the left, or the right, depending on it's color.

There are three colors:

- Red or Orange plants sorted to the left.
- Green plants sorted to the right.





Challenge 12 – use VEX IQ ClawBot

# with obstacle sensor in Challenge Pack

**Container Handling Classic Challenge** - For this challenge, use a Loop to program your robot to move a number of objects into a zone. The objects are placed at irregular intervals, so you will have to use a sensor to detect each one. The robot should then use its arm to transport the object back into a zone and release it.

