# ALGORITHMS

## For This Robot

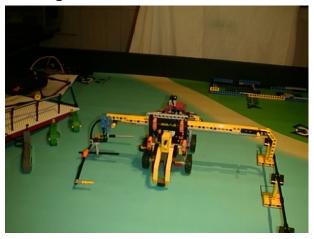


### Program 1: Multitask Circuit

### Robot In Base



### Realign \_\_\_\_



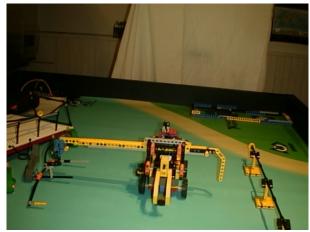
Push Broken Pipeline



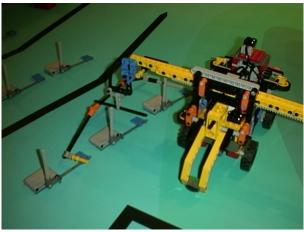
### Flag Fork Down



Tag The Shark\_



Move To Flags



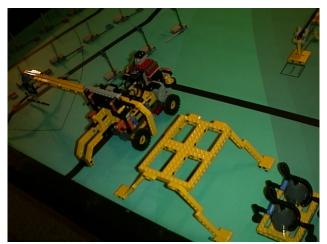
### Robot In Base



### Protect Pumpstation



### Flag Fork Down

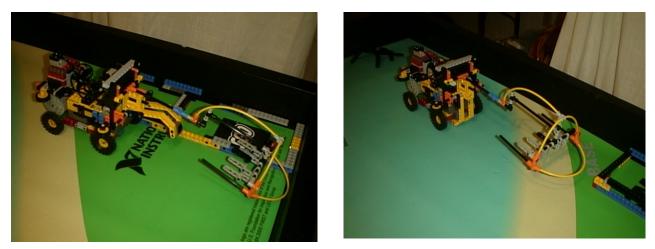


Return To Base

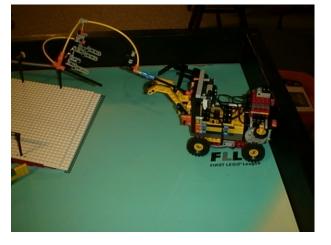


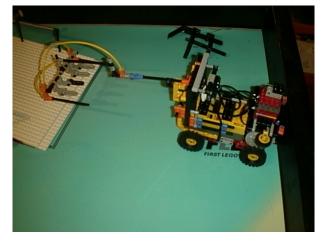
### Program 2: Deploy the Submarine

Position robot and hook. Touch sensor to continue. Robot moves.

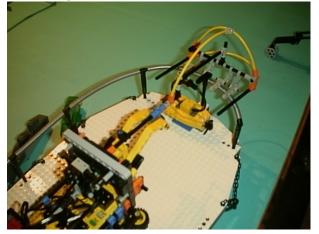


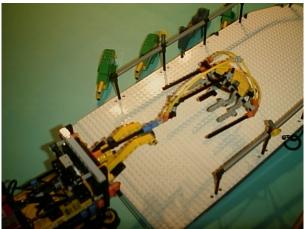
Robot turns and aligns with research vessel. Robot climbs vessel.



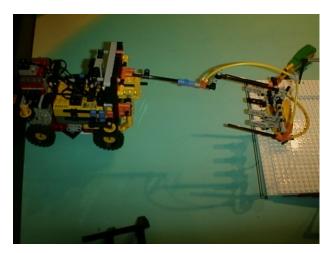


Skid up & hook over the sub. Skid down & hook level with deck rail.

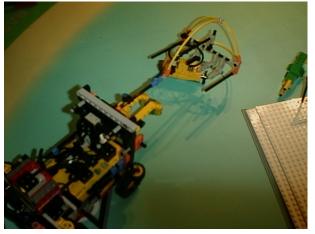




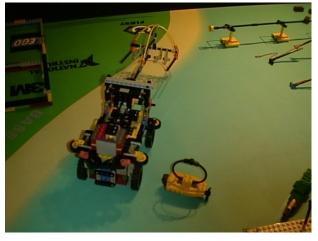
Robot exits research vessel.



The submarine is hooked.

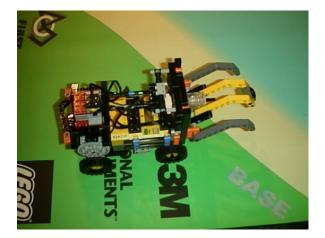


The robot turns and returns to base.



## Program 3: Decide about the artificial reef.

Install Claw. Position Robot. Touch sensor to continue.





Move to artificial reef. Lower skid to grab with claw.



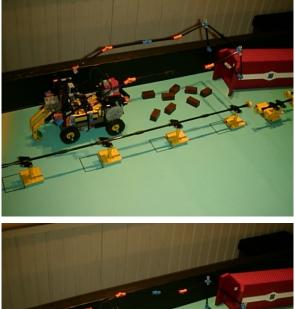


Robot moves back dragging the artificial reef.





### Program 4: Clean-Up The Cargo Spill





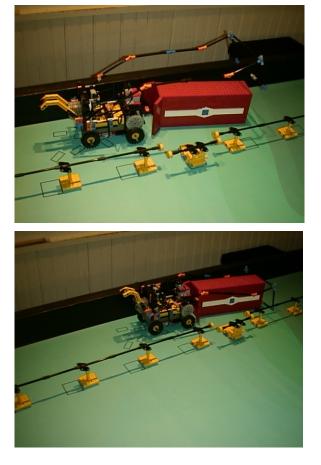


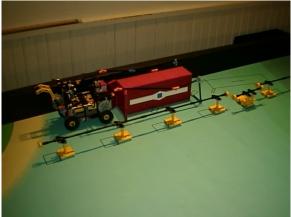
Install Net. Program 3. Back to position net over crates.

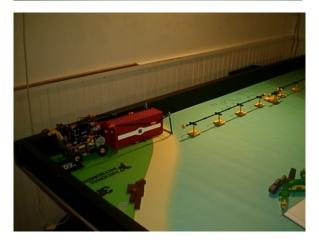
#### Lower Net

#### Slide crates to base.

#### Quickly remove crates.







Reposition Robot in Base. Press the touch sensor to continue the program.

### Lower Net

Slide shipping container to base.

#### Remove shipping container.

# Program 5: Artifacts (Dolphin optional)



