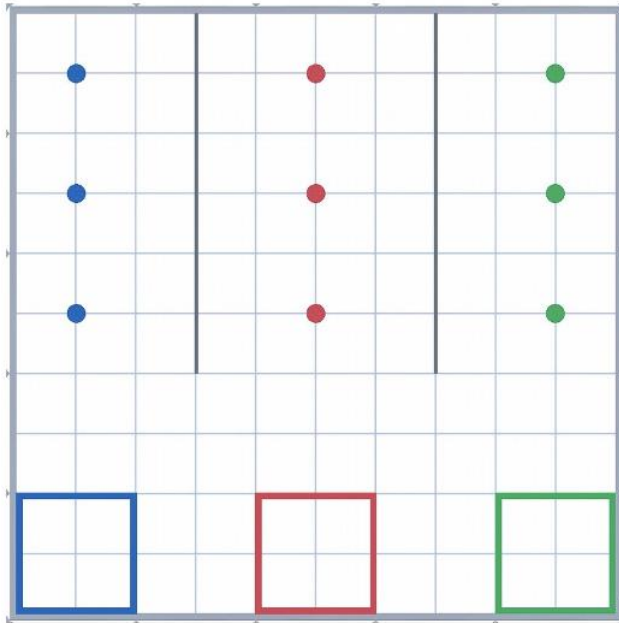


Spring 2021

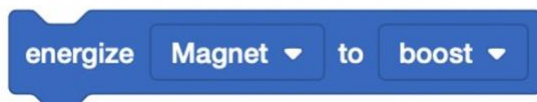
**CISC 1003 – Electro Magnet**

We will be using the VR.VEX environment for our class: <https://vr.vex.com/>

Playground: Disk Mover



Here are some useful blocks to use in your program. Be sure to set them properly for your assignment.



Collect the blue discs and place them in at the back of the blue box (near the wall). Do not use fixed distances to move. Move forward until the down eye senses the color blue. Then boost the electromagnet to pick up the disc and turn around facing the bottom of the screen and move till the front eye is near an object. Then the robot is near the object, set the electromagnet to drop and the disc will fall on the ground. Repeat this until 3 blue discs are gotten. Can you adjust the code so that it works for any number of discs (notice that there are 4 walls in the world).

Keep the velocity set to 50%, otherwise the robot moves too fast for the sensors to notice the discs.

### **Additional instructions:**

Add a comment with your name (using the gray box) at the beginning of the program. Place comments (using the gray boxes) in the program to explain what the program will be doing.

### **Submitting Projects/HW:**

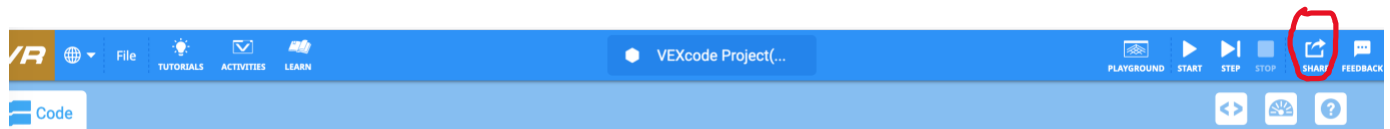
When submitting your assignments, please submit the following:

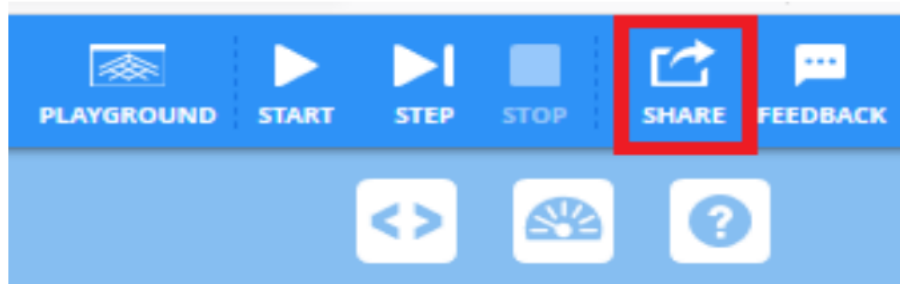
- PDF of the code
- VEXcode Project
- Screenshot of the playground after the program has stopped.

Your submission should include these three files, Name your document file using your Last name.Firstname and The lab name. E.g., Doe.Jane.obstacleavoidance.pdf, etc..

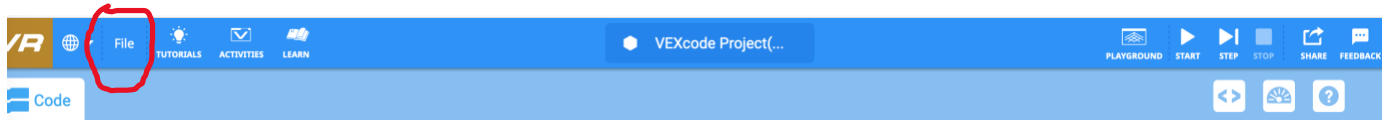
How to get these items:

- PDF of the code: share the code to get the PDF image of the program





- VEXcode Project: In the VEX code project go to: File, Save to Your Device



- Save a screen shot of the robot playground that showed what the robot after the program is complete:  
<https://www.theverge.com/2019/11/8/20953522/how-to-take-screenshot-mac-windows-pc-iphone-android>
- Adapted from material by Prof. Lawrence Goetz