CISC 1003

Group #: ____ Name: 1. _____

2. _____

3. _____

Spring, 2022
Section T8

Unit E – Lab Assessment

Instructions:

1. For each project, first create an algorithm describing in detail how the robot solves the problem step by step. Write your algorithm in plain English as a numbered list of executable steps. Then create a corresponding VEXcode VR program and test it to make sure it works.
2. Submit your finished project as three files: 1) A PDF file containing the algorithm for the project 2) A PDF file for the project program 3) A .vrblocks file for the project program.

Project #1:

In this project, you will use the **Disk Mover Playground.** You will program the robot to pick up and drop all the disks. First the robot will drive to the first blue disk, pick it up, and then drive back and drop the disk on the blue goal area. Then it will repeat these actions for the second and third blue disks. You **MUST** use the loop (repetition) block(s) to program the robot to repeatedly pick up and drop all blue disks. After the robot picks up and drops down all the blue disks, the robot should repeat these actions for all the red and green disks. After the robot finishes with the green disks, it should stop. You **MUST** use nested loops (a loop block within another loop block) to program the robot to repeat these actions for all three colors of disks.

Hint: If the robot's down eye doesn't detect the disks occasionally, set robot's speed to a lower speed.