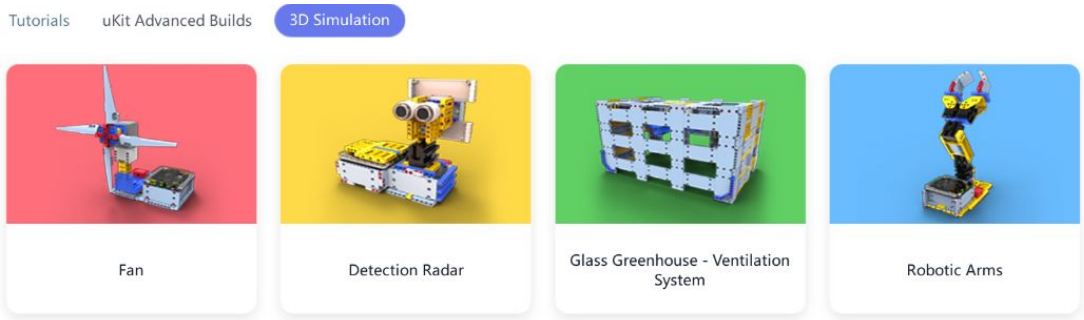
Topic: Programming

Short Description: In this lesson, you will build a program to drive and control a virtual Robotic Arm. Your goal will be to write a code that will operate the Robotic Arm to pick up a ball and place it on the designated circle.

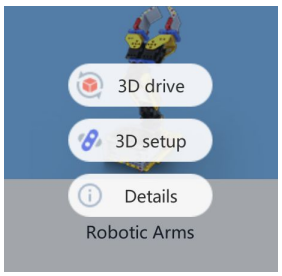
Steps:

1. To get started, open uCode and go to the **3D** tab found at the top of the screen.

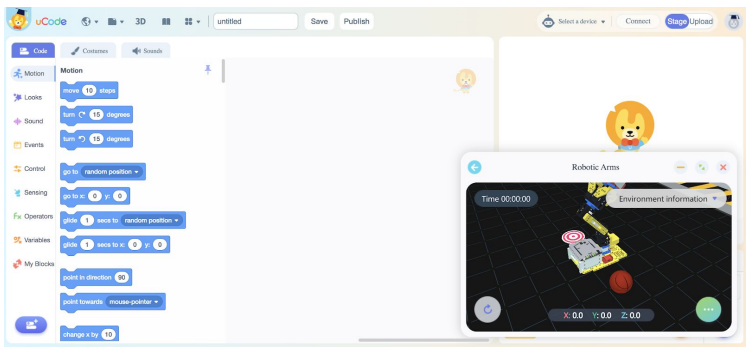
Click on **3D Simulation** and find the Robotic Arms robot.



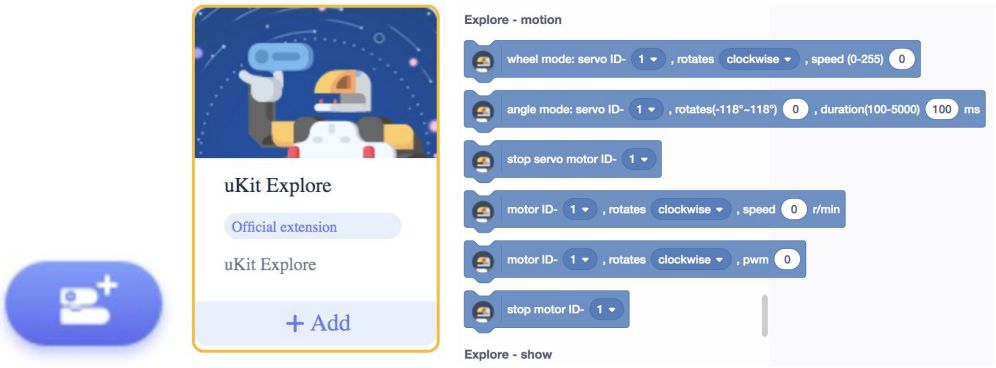
Select **3D drive**.



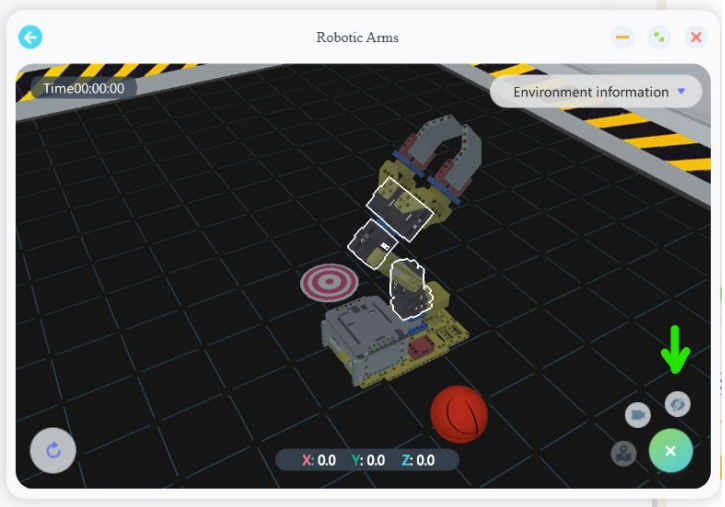
2. Resize the virtual environment window so you can see it and also access the coding space.



3. Add the **uKit Explore** blocks by clicking on the **Extensions** button found in the lower-left corner of your screen.



4. To determine which servos to program, use the eye icon that appears when you click the green button in the virtual environment's lower right corner. This feature will highlight the moveable components within the build.



5. Here are a few sample codes to get you started. Note the change in servo ID.