

Student Name:

Assignment:

Notes:

Project Name: Treasure Hunt Competition Solution (1)

Project Type: Blocks

Date: Mon Mar 02 2026

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when started
  Turn on the Optical light to allow it to see the block color better
  set Optical2 light on
  This variable changes to which block out of the 5 the robot is currently on
  set block to 1
  repeat 5
    Move to the block
    drive forward for 305 mm
    turn left for 90 degrees
    drive forward for 150 mm
    wait 1 seconds
    Detects if the block color is red
    if Optical2 detects red ? then
      If the block is red the claw will close
      spin ClawMotor forward for 30 degrees
      drive reverse for 150 mm
      turn right for 90 degrees
      1650mm is the distance to the end of the field
      The block times 300mm is subtracted to get the distance from the current block to the end
      E.g. if on the 3rd block, 1650 - 900 = 750 which is the remaining distance to the end
      drive forward for 1650 - block * 300 mm
      Open the claw and go back
      spin ClawMotor to position 0 degrees
      drive reverse for 1650 - block * 300 mm
      Changes the variable as it is now moving onto the next block
      change block by 1
    else
      If the block is not red then the robot will drive back to the center
      drive reverse for 150 mm
      turn right for 90 degrees
      Changes the variable as it is now moving onto the next block
      change block by 1
  
```