SCENARIO		
Title	**Robot as a windmill.**	
summary	Students are to write a program for a robot that cleans up a confined space.	
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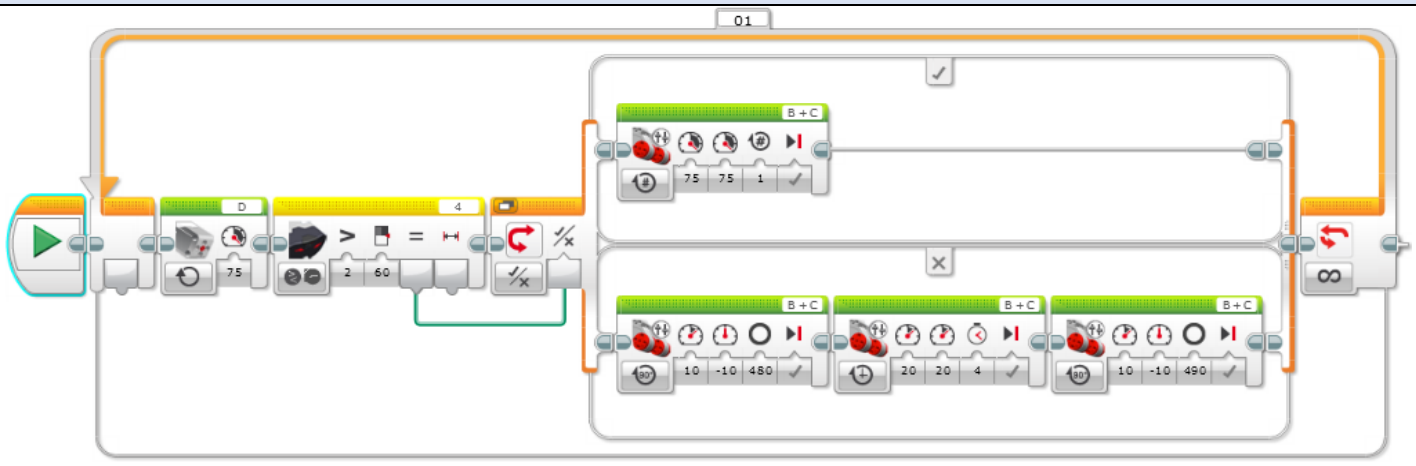
Didacticobjectives
General objectives: - the student knows the concepts: algorithm, instruction, - turning activities into instructions, - reminding and consolidation of the LEGO MINDSTORMS EV3 Home Edition program, - developing the solution project and its implementation using the program. **Specific objectives:** - how to start the program and what the LEGO MINDSTORMS EV3 Home Edition window looks like, - basic blocks for building algorithms in the program, - they know how to create simple algorithms in the program, -can write instructions to individual blocks, - how to run an algorithm built in the program, - the student can control the robot using commands, - the student can build simple scripts, - the student understands and knows how to apply loop instructions to repetitive activities
Physics☐ Mathematics☐ Computer science☐ Robotics☐ Programming ☒
Educational level: 10-12 years old☐ 12-14 years old ☒

Problem Statement
Creation of an algorithm controlling the robot in a closed space, operating non-stop, with a working propeller.
BOM (Bill Of Materials needed)
- computer station - LEGO MINDSTORMS EV3 robot
Activity description
1. Organizational and organizational activities 2. Group work (groups of 4) - voluntary selection of the group composition 3. Choosing the team's captain who will present the group 4. Introduction to the topic - discussion of the ways in which the robot moves in a closed space, controlled by a specific condition 5. Reminder of conditional instructions 6. Robot control using conditional expressions. 7. Task specification: writing a program for a robot that will move in a closed space 8. Detailed discussion of the selected problem and division into smaller sub-problems 9. Exchange of experiences and ideas 10. Practical exercises - writing the program and working with the LEGO MINDSTORMS EV3 robot. 11. Presentation of programs 12. Summary and end of the lesson.
Resources


Students' Evaluation
The student will be assessed for commitment and proper performance of experiments.
Bibliography
I like this! - Computer science textbook for the seventh grade of primary school Authors: Grażyna Koba https://www.robocamp.pl/pl/lego-mindstorms-ev3-wersja-domowa-edukacyjna/
Scalability
Script modification and improvement.
Moreinformation
Solving tasks using the program.