**Robot Drive Autonomous Assignment with Ultrasonic Sensor A [ / 10 ] K [ / 10 ]**

**Group work- (code/comments/demonstration)**

Program your robot to perform the following actions as it follows the sequence shown on the different pictures below:

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The robot should come as close as possible to the cardboard blue boxes but without touching them. In your program you will use the ultrasonic sensor, and the two motors present in the robot.

You will hand in the code with comments and calculations.

In addition, the program will be tested with the robot and it will be marked according to the following rubric.

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| --- | --- | --- | --- | --- | --- |
|  | **50–59%**  **(Level 1)** | **60–69%**  **(Level 2)** | **70–79%**  **(Level 3)** | **80–100%**  **(Level 4)** | Mark |
| **Application of knowledge**  **and skills** *(e.g.,concepts,*  *processes,use of equipment*  *and technology)* **in familiar**  **contexts** | applies knowledge  and skills in familiar  contexts with limited  effectiveness | applies knowledge  and skills in familiar  contexts with some  effectiveness | applies knowledge  and skills in familiar  contexts with  considerable  effectiveness | applies knowledge  and skills in familiar  contexts with a  high degree of  effectiveness | 10 |
| **Knowledge** of content  *(e.g., facts, equipment, terminology,*  *materials)* | demonstrates  limited knowledge  of content | demonstrates  some knowledge  of content | demonstrates  considerable  knowledge of  content | demonstrates  thorough knowledge  of content | 10 |

