2IO75 (2021-4) DBL Embedded Systems

Melody Report

Task Description

- Explain how to implement the melody challenge with disk colors

Explanation

- The disk colors will be encoded as 0s and 1s with respect to their color. (White as 0 and black as 1)
- There will be a pattern of 0s and 1s in *n*-bit as *n* being the number of disks used. For example, when there are 3 disk inputs, the binary pattern may be *101* and so 5 in decimal.
- Then we are going to get the modulo of *k* of the decimal we found as *k* being the number of different melodies that the buzzer can play.

Conclusion

- This way, the melody will be dependent on the pattern of disks processed on the robot.

Further Step

- There maybe an implementation with LEDs with the same logic explained above.

Problems

- The coding may get too big because of different types of melodies that we are going to implement.