4. Case 02: Light Control

4.1. Purpose

- Programme to control the colour of the LED lights.

4.2. Material

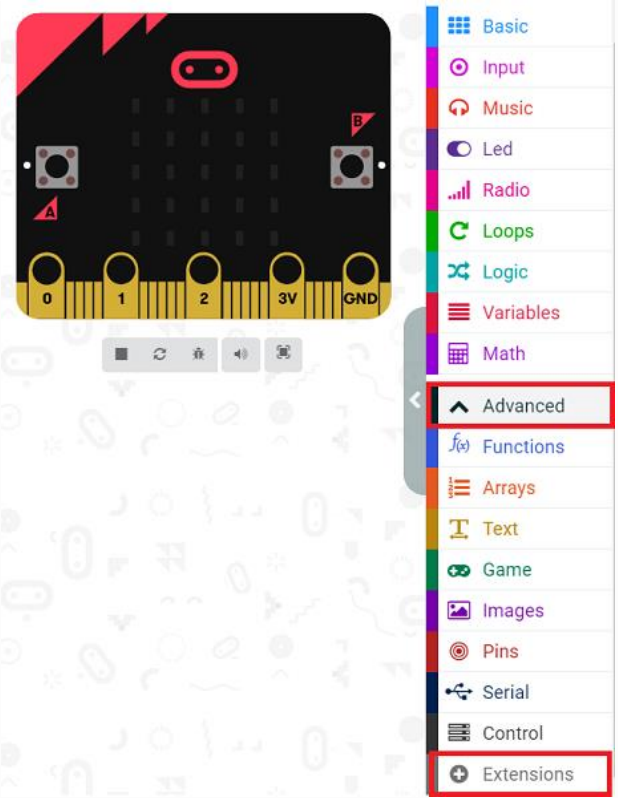
- 1 x TPBot

4.3. Software

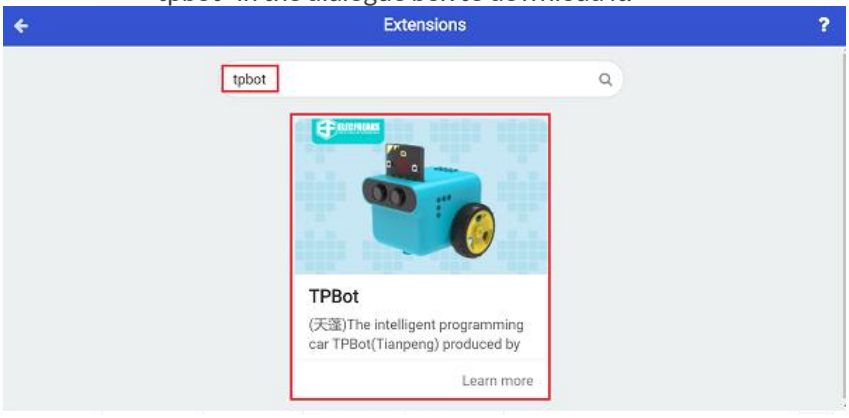
MicroSoftmakecode

4.4. Programming

- Click “Advanced” to see more choices in the MakeCode drawer.

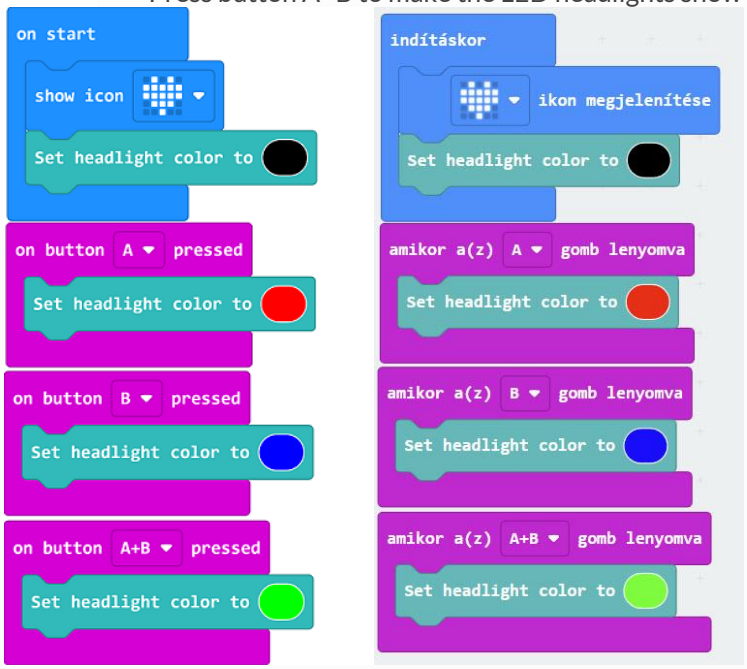


- We need to add a package for programming. Click “Extensions” in the bottom of the drawer and search with “tpbot” in the dialogue box to download it.



##Sample A

- The LED headlights are in black while on start, and the micro:bit shows an icon.
- Press button A to make the LED headlights show red.
- Press button B to make the LED headlights show blue.
- Press button A+B to make the LED headlights show green.



Link

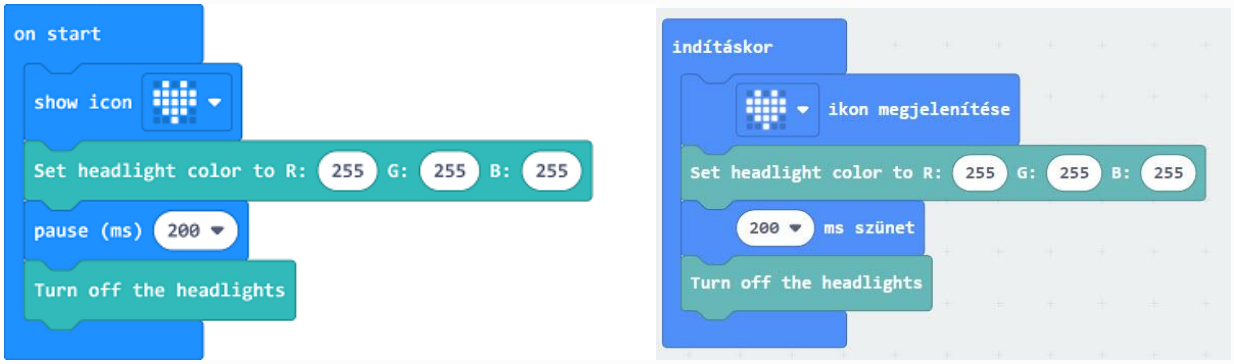
- Link: https://makecode.microbit.org/_0RM5AJgos7C5
- You may also download it directly below:

4.5. Conclusion

- Control the colour of the headlights with the buttons.
- Press button A to make the LED headlights show red.
- Press button B to make the LED headlights show blue.
- Press button A+B to make the LED headlights show green.

##Sample B

- While on start, set the micro:bit showing an icon and the LED headlights in red for 2 seconds and then turning off.



Link

- Link: https://makecode.microbit.org/_P5cJ7oV1664J
- You may also download it directly below:

4.6. Conclusion

- The micro:bit displays an icon while on start and the LED headlights of the TPBot show white for 2 seconds and then turn off.