## 7. Case 05: Automatic Lamp

#### 7.1. Purpose

• Programme to turn on the lights automatically in the darkness.

# 7.2. Material

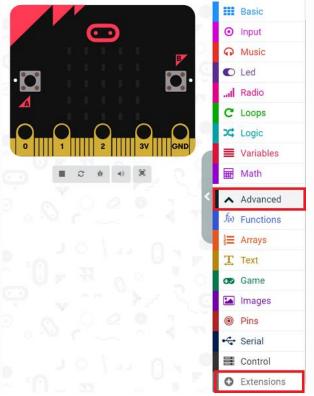


#### 7.3. Software

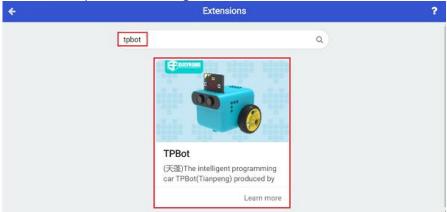
### **MicroSoftmakecode**

#### 7.4. Programming

• Click "Advanced" to see more choices in the MakeCode drawer.

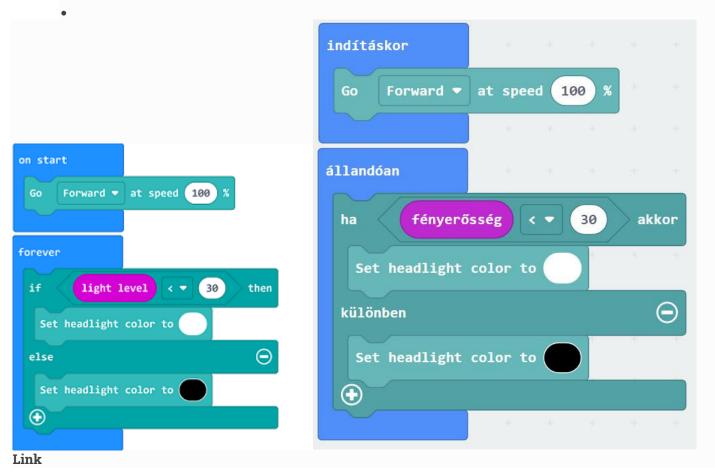


- We need to add a package for programming. Click "Extensions" in the bottom of the drawer and search with
  - "tpbot" in the dialogue box to download it.



#### ##Sample

- Set to move forward at the speed of 100%.
- Judge if the current light intensity is below the set point, if yes, set the headlights in white; or in black.



- Link: https://makecode.microbit.org/ 4Wm85b3K4ikU
- You may also download it directly below:

#### 7.5. Conclusion

• Power up to set the TPBot driving forward and turning on/off the headlights automatically while it goes into the dark/bright area.