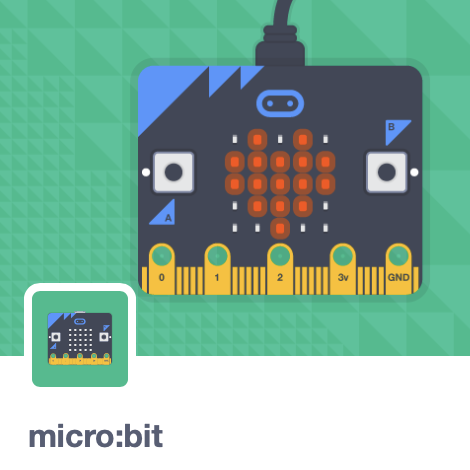
# **Scratch logo and symbol, meaning, history, PNGScratch-Snake**

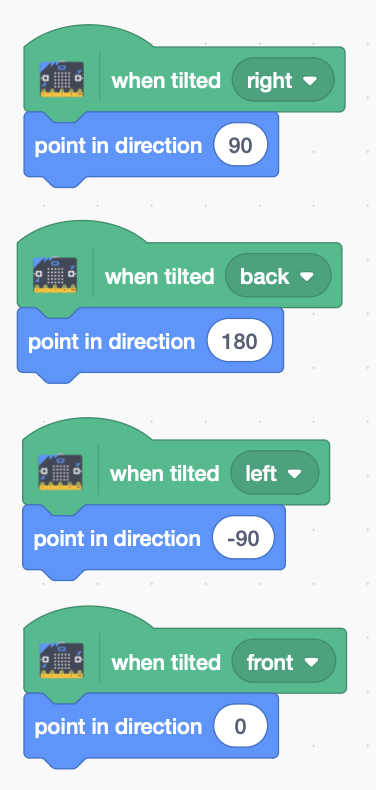
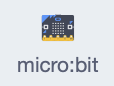
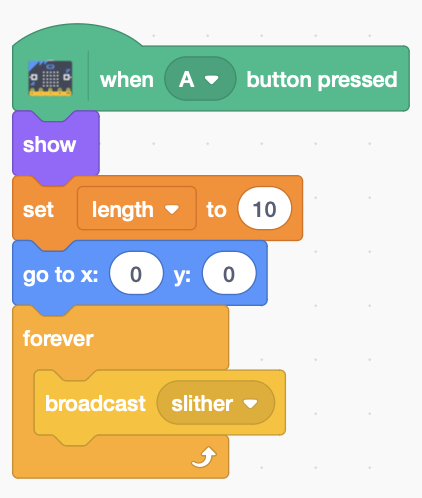
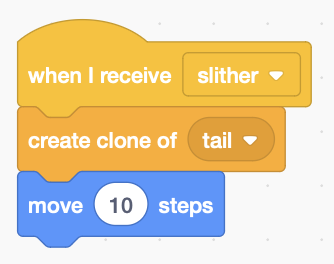
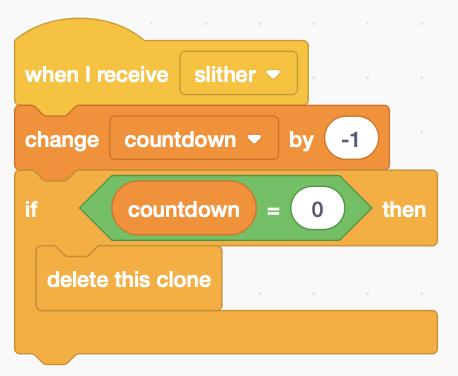
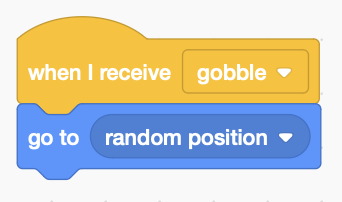
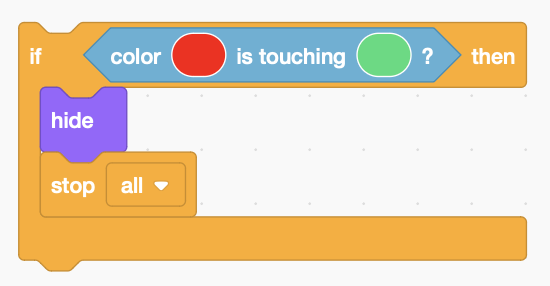
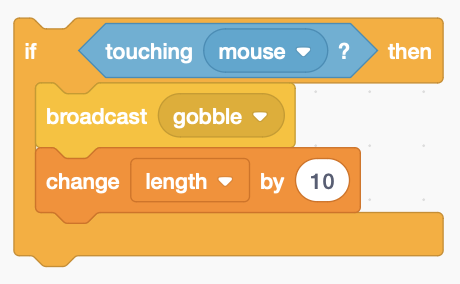
Register/login at <https://scratch.mit.edu>

Preparation: Requires Scratch Link



*The classic ‘Snake’ game using the micro:bit   
tilt sensor. The snake cannot cross itself, but it grows longer when it eats!*



1. Create a new Scratch project and add the **micro:bit** extension.
2. Download graphics from: <https://codeclub67.github.io/images/snake.gif>
3. Create a new sprite with the download.
4. Duplicate the sprite, and rename it **‘tail’**.
5. Choose the body costume for the **tail**.
6. Plug the micro:bit into the PC with the USB.
7. Click on the  blocks section. If you see  at the top then connect the micro:bit.
8. Add the code (right) to the snake head, changing **direction** **when tilted**.
9. Use button A to start the game with the snake at the centre 0,0. Create a **global** (seen by all sprites) variable to store the snake **length**, initially 10, and **broadcast** a new message.
10. **Add **snake** code (right) to receive the message. It grows by **cloning** a **tail** as it **moves**.
11. **Select the tail and create a countdown variable local to the sprite.
12. Add **tail** code (left) that initialises **countdown** to the **length**, and aligns its position and direction with the head. The tail, initially hidden, is then shown.
13. When the tail receives the message, it counts down, and on 0 deletes itself.
14. **Back to the **snake**’s head. Extend the ‘slithering’ code (left) by detecting GAME OVER when the snake’s red tongue touches the light green of its own body.   
    *Use the colour picker to get the right colours*.
15. Create a “mouse” sprite. The code (right) makes it appear randomly after being eaten.
16. Finally, extend the **snake** ‘slithering’ code again (left), detecting when it **touches** the **mouse,** then **gobbles** it up and grows in **length**.

***Save*** *your code with a good name.****File > Save now***