

Loop Control Statements

8.Explain the use of break, continue, and goto statements in C. Provide examples of each.

→ **break Statement:**

→ **Usage:** Terminates the nearest enclosing loop or switch statement.

→ **Example:**

→ for (int i = 1; i <= 10; i++){

→ if (i == 5) {

→ break; // Exits the loop when i is 5

→ }

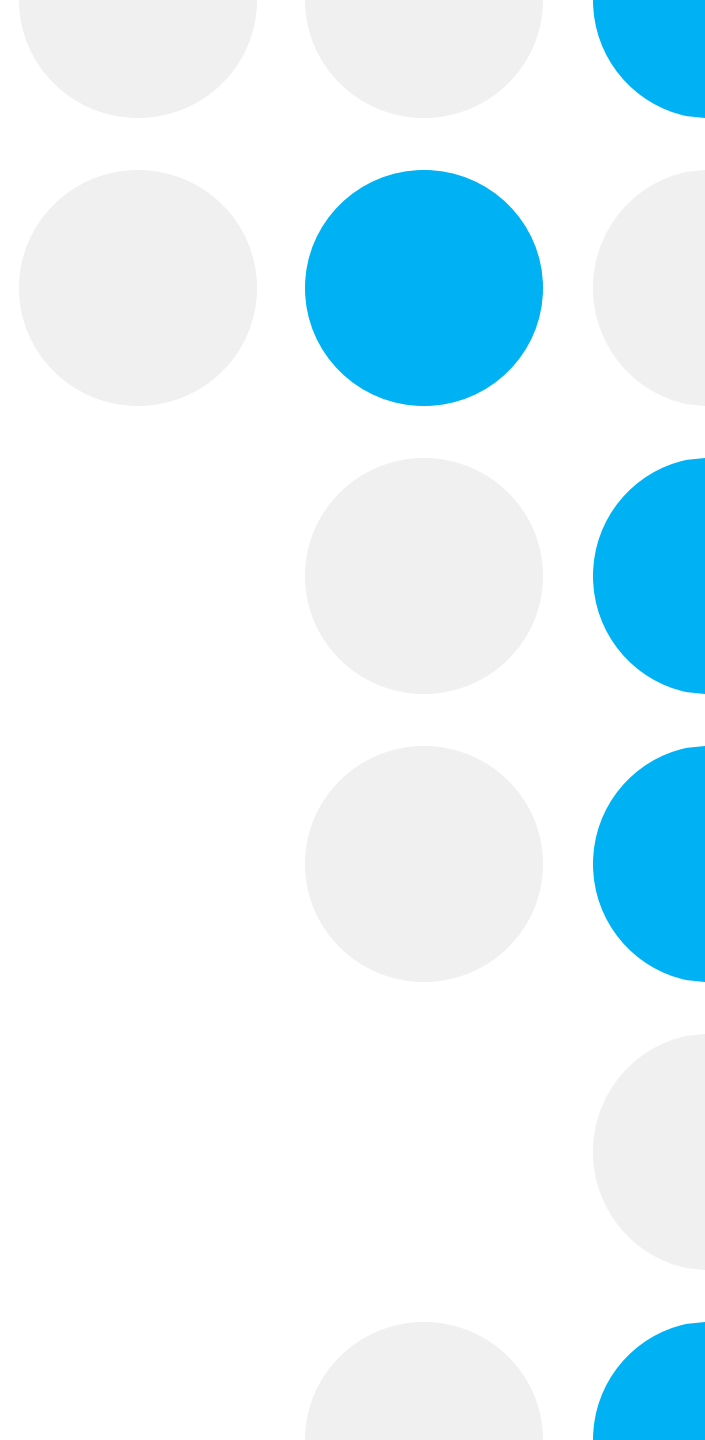
→ printf("%d\n", i);

→ }

→ **// Output:** 1 2 3 4

→ **continue Statement:**

→ **Usage:** Skips the current iteration of the loop and moves to the next iteration.



→ Example:

→ for (int i = 1; i <= 10; i++) {

→ if (i % 2 == 0) {

→ continue; // Skips even numbers }

→ printf("%d\n", i);}

→ }

→ // Output: 1 3 5 7 9

→ goto Statement

→ Usage: Jumps to a labeled statement within the same function, which can lead to unstructured flow control.

→ Example:

→ for (int i = 1; i <= 10; i++) {

→ if (i == 5) {

→ goto end; // Jumps to the label 'end'}

→ printf("%d\n", i); }

→ end: // Label

→ printf("Exited the loop.\n");

→ // Output: 1 2 3 4 Exited the loop.

