- 1. Repeatedly executes code while a condition is true.
- 2. `while` checks the condition first, `do-while` runs code one time at least before checking.
- 3. It checks a user input until a piece of valid data is provided and I used it for the Guessing Game Mastery
- 4. a) Loop that never stops.
 - b) 1. Condition always true.
 - 2. Logic error in condition.
 - c) Variable exceeds its max value.
- 5. 60 times.
- 6. $x \ge 120$ would make it infinite.
- 7. Counters track occurrences (e.g. loop count), accumulators sum values (e.g. totals).
- 8. int sum = 0; for (int i = 3; i <= 10; i++) sum += i;
- 9. 1. Known vs unknown iterations.
 - 2. Whether the loop must run at least once.