🧩 Task 2: Control Flow.

✅ Task 2: Control Flow (Conditions & Loops)

🎯 Goals:

- Make decisions in code using if, else, switch

- Repeat actions using loops like for, while

- Understand how to exit or skip parts of loops with break and continue

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📘 Concepts to Learn:

◆ 1. Conditional Statements

🟧 if, else if, else

const serviceType = "car wash";

if (serviceType === "plumbing") {

  console.log("Assign a plumber.");

} else if (serviceType === "car wash") {

  console.log("Assign a car wash team.");

} else {

  console.log("Service not available.");

}

🟩 switch

switch (serviceType) {

  case "plumbing":

    console.log("Assign plumber.");

```
    break;
  case "car wash":
    console.log("Assign car wash team.");
    break;
  default:
    console.log("Unknown service.");
}
```

◆ 2. Loops

🟦 for loop

```
for (let i = 0; i < 3; i++) {
  console.log("Booking slot #" + (i + 1));
}
```

🟧 while loop

```
let count = 0;
while (count < 3) {
  console.log("Reminder #" + (count + 1));
  count++;
}
```

🟥 do...while loop

```
let tries = 0;
do {
  console.log("Attempt " + tries);
  tries++;
} while (tries < 2);
```

◆ 3. Loop Control: break and continue

```
for (let i = 1; i <= 5; i++) {

 if (i === 3) continue; // skips 3

 if (i === 5) break;   // exits before printing 5

 console.log(i);

}
```

🧪 Practice Exercises

✅ Exercise 1:

Write a function assignService(team) that:

- Takes a service name as input

- Returns "Team Assigned" for "car wash" or "plumbing"

- Returns "Invalid service" otherwise
  Use both if and switch versions.

✅ Exercise 2:

Write a function countDown(n) that prints numbers from n down to 1 using a loop.

✅ Exercise 3:

Create a for loop that:

- Loops through numbers 1 to 10

- Skips even numbers (continue)

- Stops the loop if it reaches 7 (break)

💬 Reflection Questions

1. When should you use a switch over if?

2. What is the difference between while and do...while?

3. What happens if you forget break in a switch case?