SWITCH STATEMENT

CONDITIONAL STATEMENT

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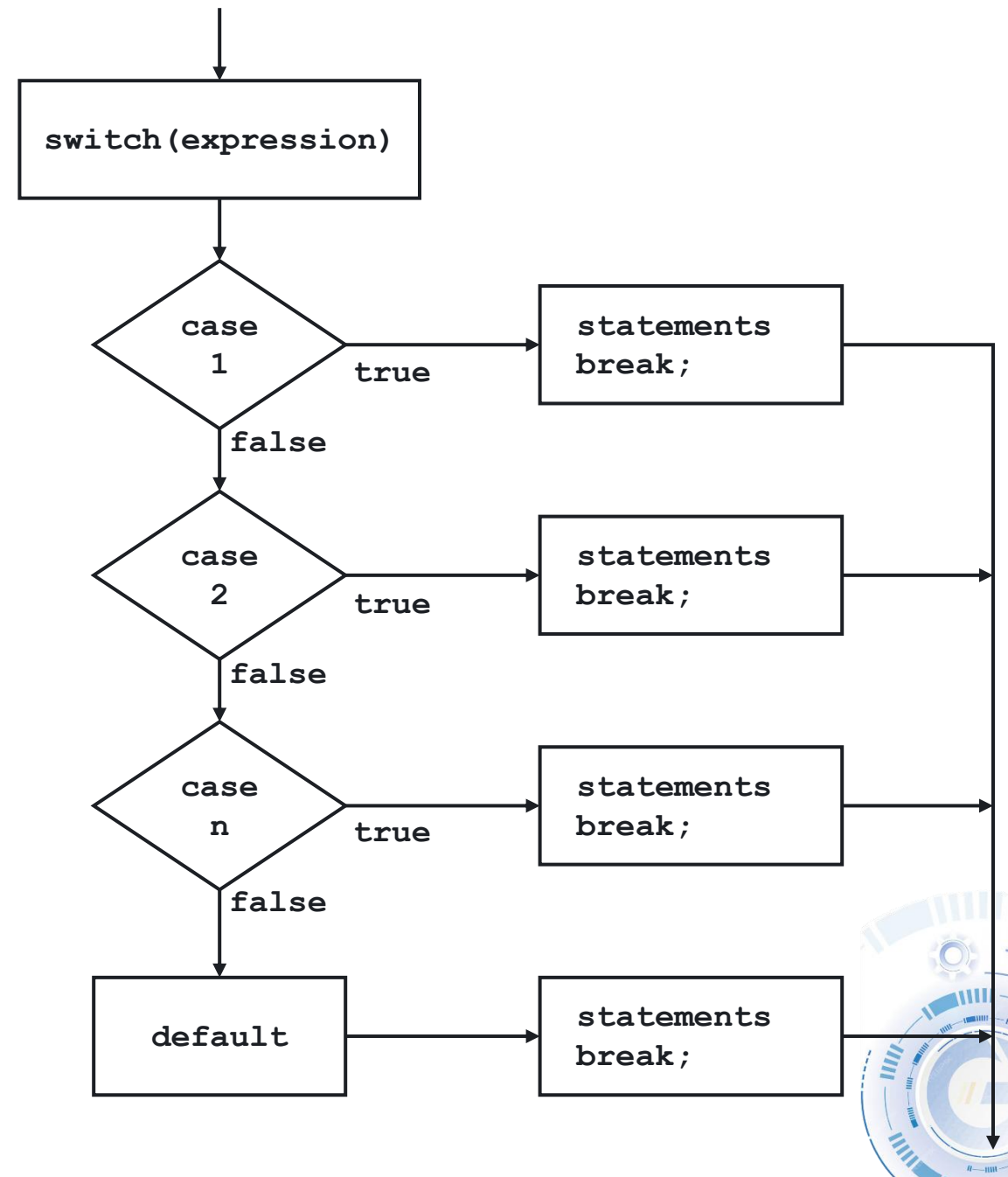Electronics Engineer

TOPIC OUTLINE

`switch` Statement

SWITCH STATEMENT

SWITCH STATEMENT

The **switch** statement is a control flow statement that allows a variable to be tested for equality against a list of values. Each value is called a **case**, and the variable being switched on is checked for each case.
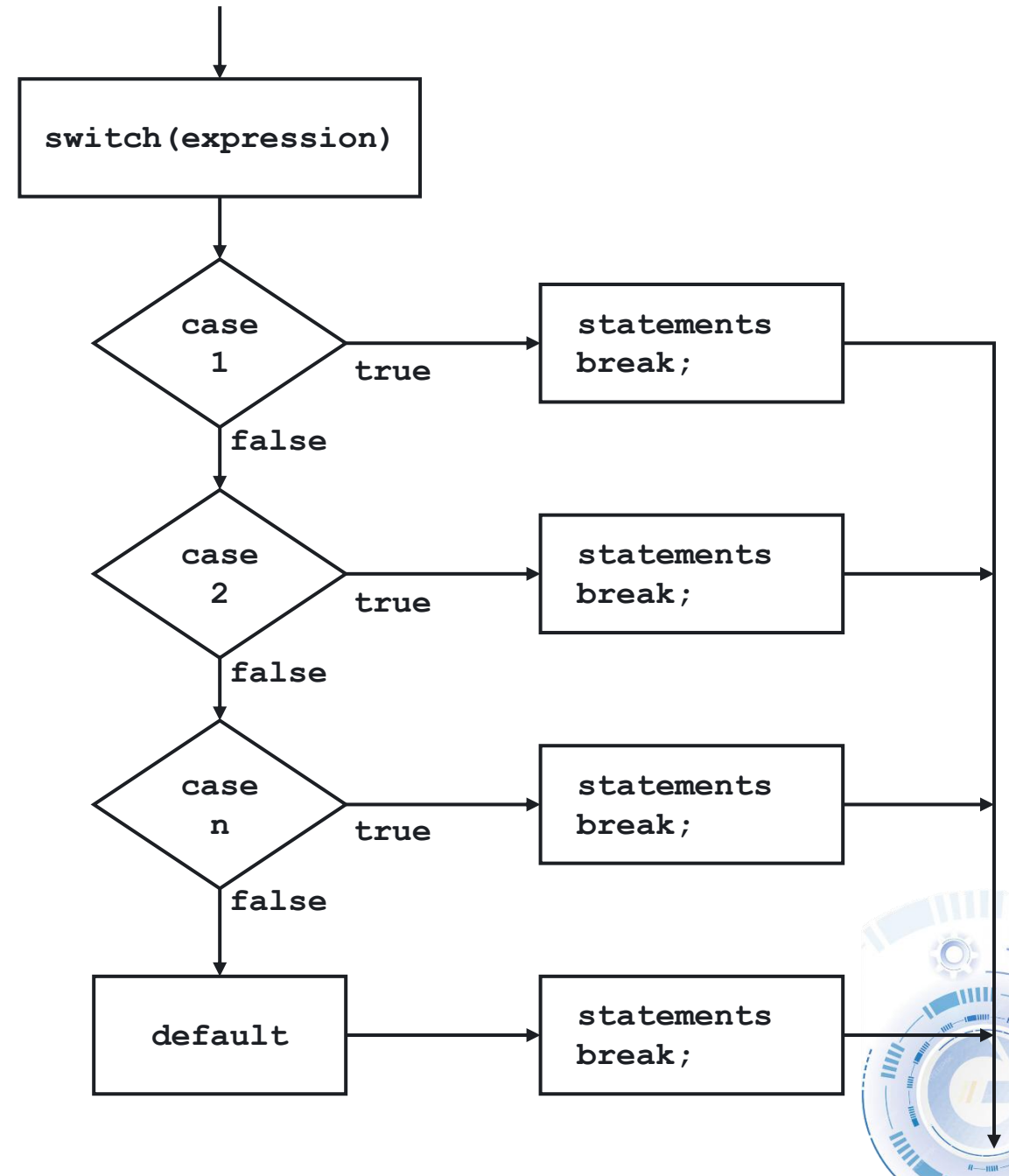
The expression in the switch must evaluate to an integral type (**int, char, enum**, etc.). Floating-point types (**float, double**) and **strings** are not allowed.

```
switch(expression)
```

```
case
1
```
true →
```
statements
break;
```

false

```
case
2
```
true →
```
statements
break;
```

false

```
case
n
```
true →
```
statements
break;
```

false

```
default
```
→
```
statements
break;
```

SWITCH STATEMENT

Syntax of `switch` statement:

```cpp
switch(expression){
    case 1:
        // statements...
        break;
    case 2:
        // statements...
        break;
    ............ more cases
    default:
        // else...
}
```

EXERCISE

```cpp
int day = 2;

if(day == 1){

    cout << "Monday";

} else if(day == 2){

    cout << "Tuesday";

} else if(day == 3){

    cout << "Wednesday";
else{

    cout << "invalid!";

}
```

```cpp
int day = 2;

switch(day){
    case 1:
        cout << "Monday";

        break;
    case 2:
        cout << "Tuesday";

        break;
    case 3:
        cout << "Wednesday";

        break;
    default:
        cout << "invalid!";

}
```

EXERCISE

```cpp
char grade = 'A';

cin >> grade;

grade = toupper(grade);

switch(grade){
    case 'A':
        cout << "Excellent";
        break;
    case 'B':
        cout << "Good";
        break;
    case 'C':
        cout << "Average";
        break;
    case 'D':
        cout << "Below Average";
        break;
    case 'F':
        cout << "Fail";
        break;
    default:
        cout << "invalid!";
}
```

LABORATORY