



IF-ELSE STATEMENT

CONDITIONAL STATEMENT

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TOPIC OUTLINE

if Conditional Statement

if-else Conditional Statement

Cascading **if-else** Conditional Statement

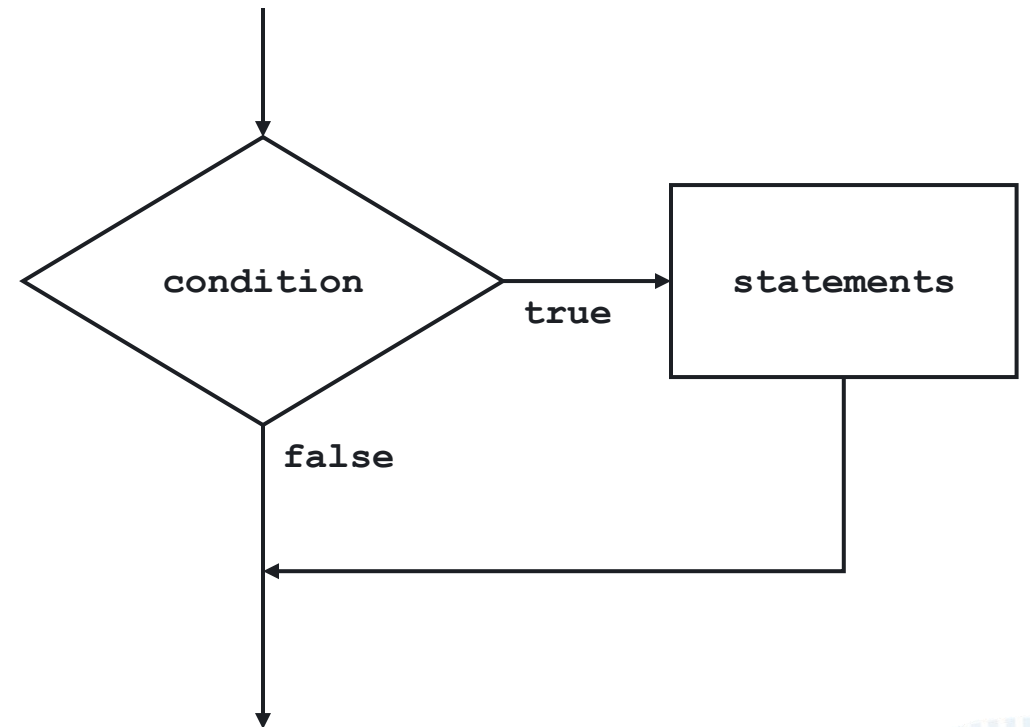


IF STATEMENT



IF STATEMENT

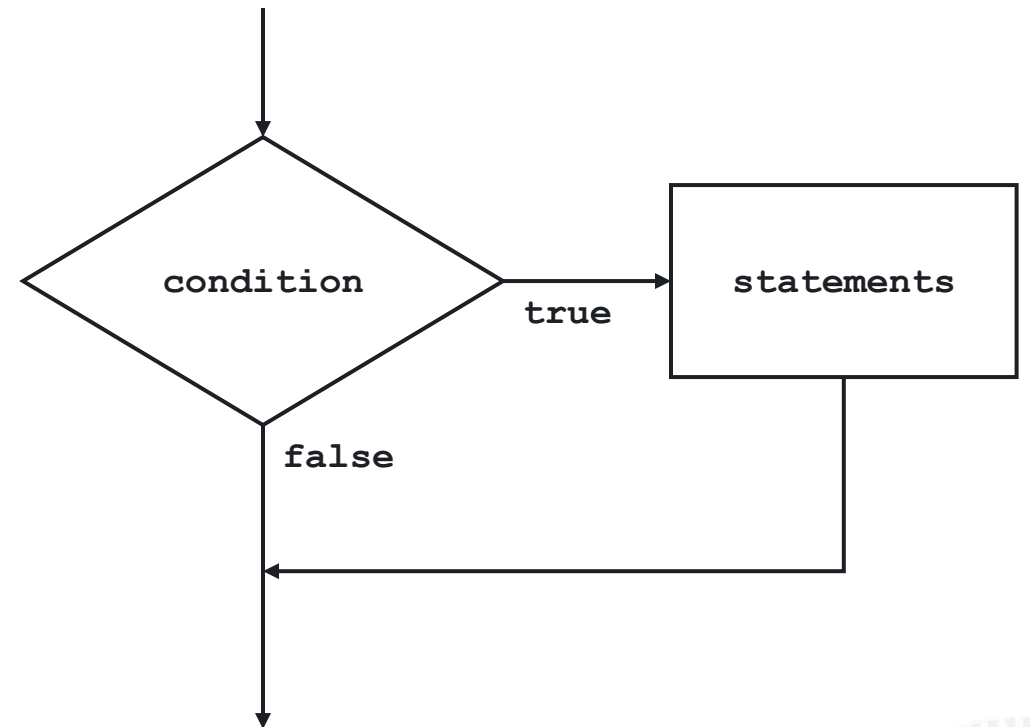
The **if** statement is a fundamental control flow statement that allows you to execute a block of code **conditionally** based on whether a specified condition evaluates to **true** or **false**.



IF STATEMENT

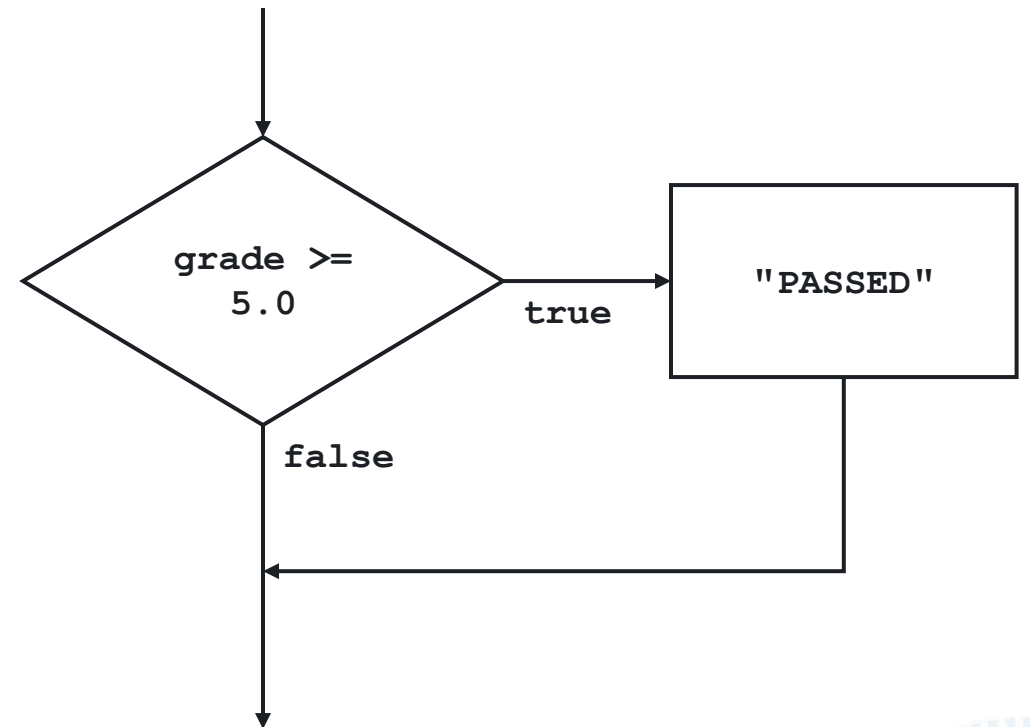
Syntax of the **if** statement:

```
if(condition) {  
    // code if the condition is true  
}
```



EXERCISE

```
if(grade >= 5.0 ){  
    cout << "PASSED!";  
}
```



EXERCISE

```
float grade = 0.0;
```

```
// enter grade
```

```
cin >> grade;
```

```
// evaluate grade
```

```
if (grade >= 5.0 ) {
```

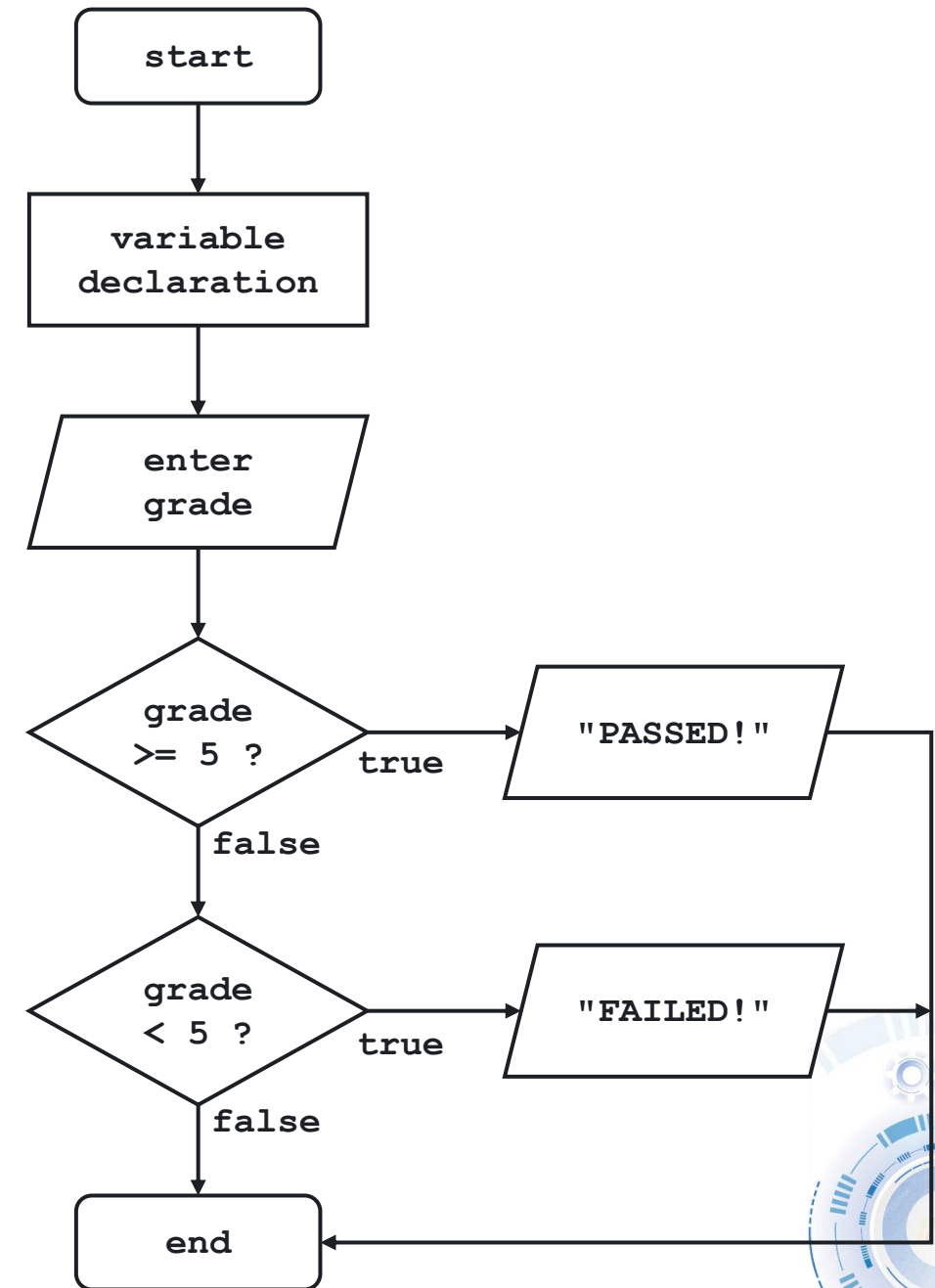
```
    cout << "PASSED!";
```

```
}
```

```
if (grade < 5.0) {
```

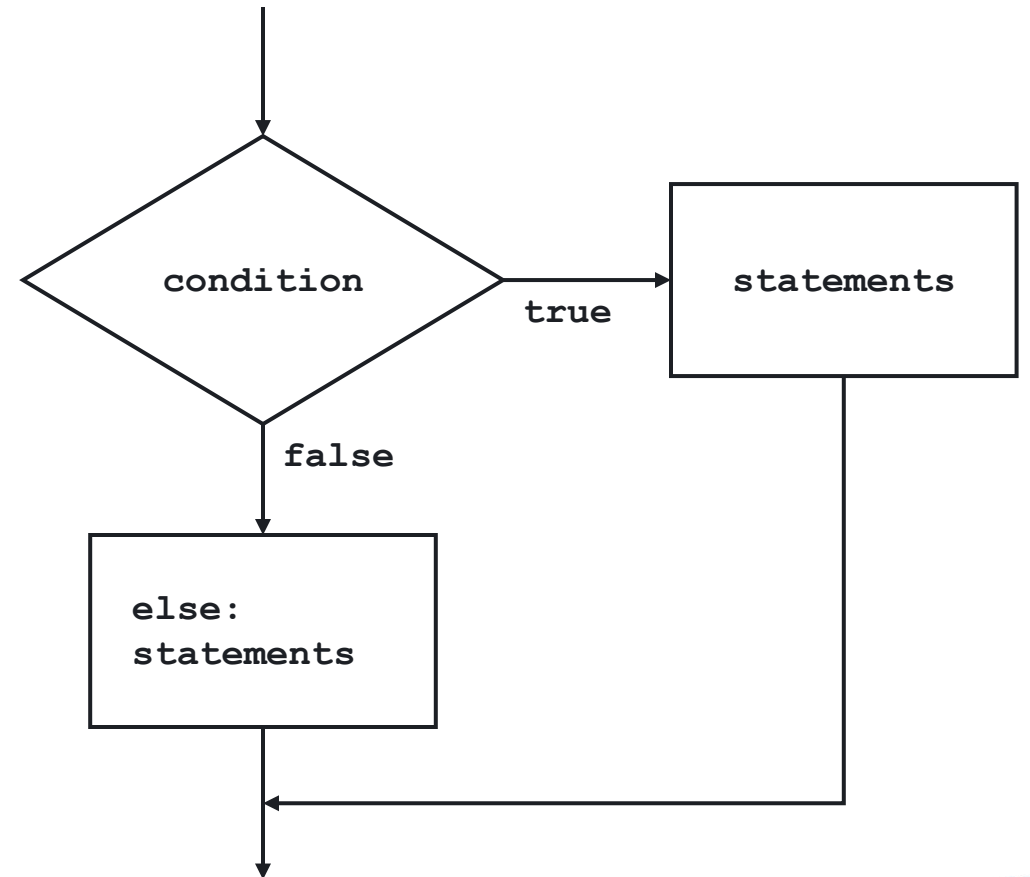
```
    cout << "FAILED!";
```

```
}
```



IF-ELSE STATEMENT

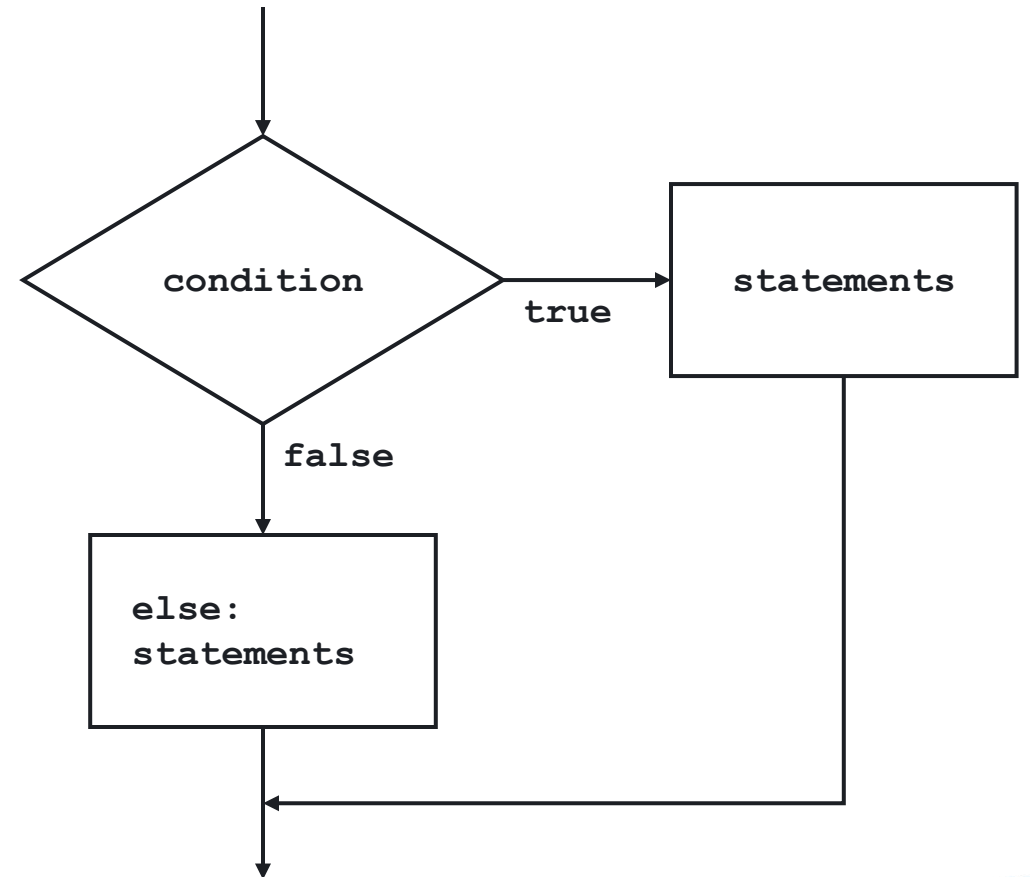
The if-else statement extends the **if** statement by providing an alternative block of code to execute if the condition is **false**.



IF-ELSE STATEMENT

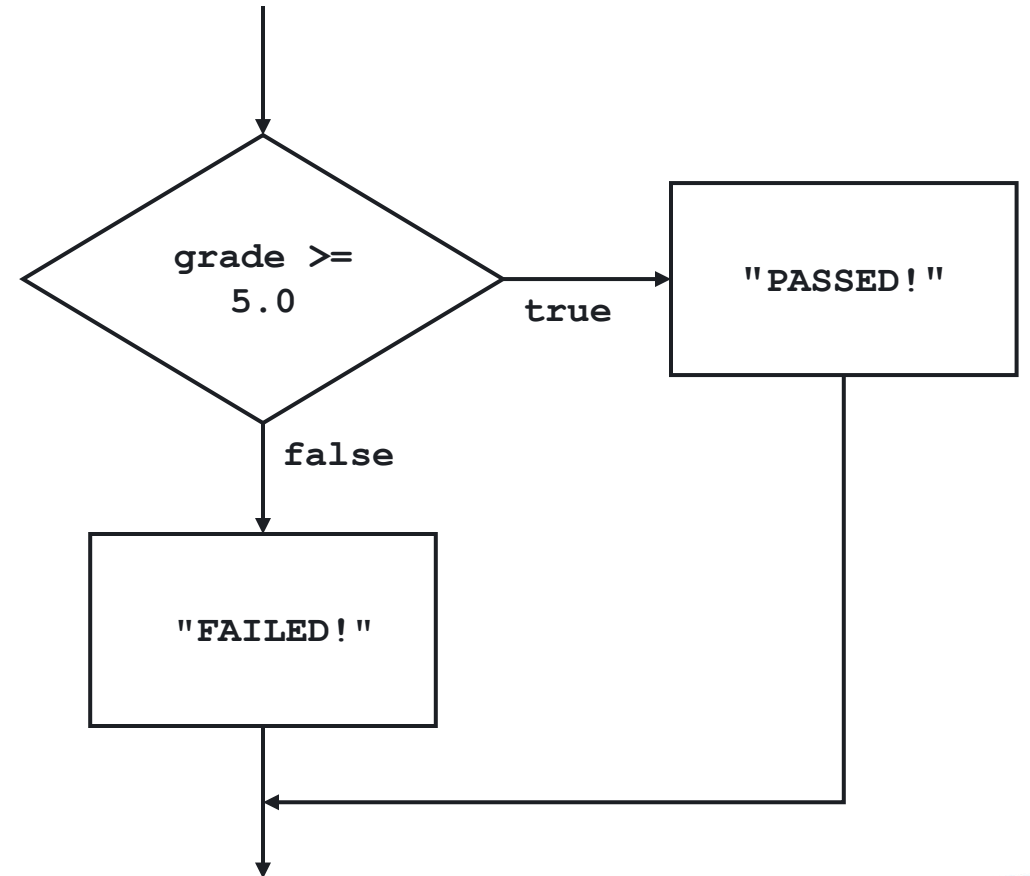
Syntax of the if-else statement:

```
if(condition) {  
    // code if the condition is true  
}  
else{  
    // code if the condition is  
    false  
}
```



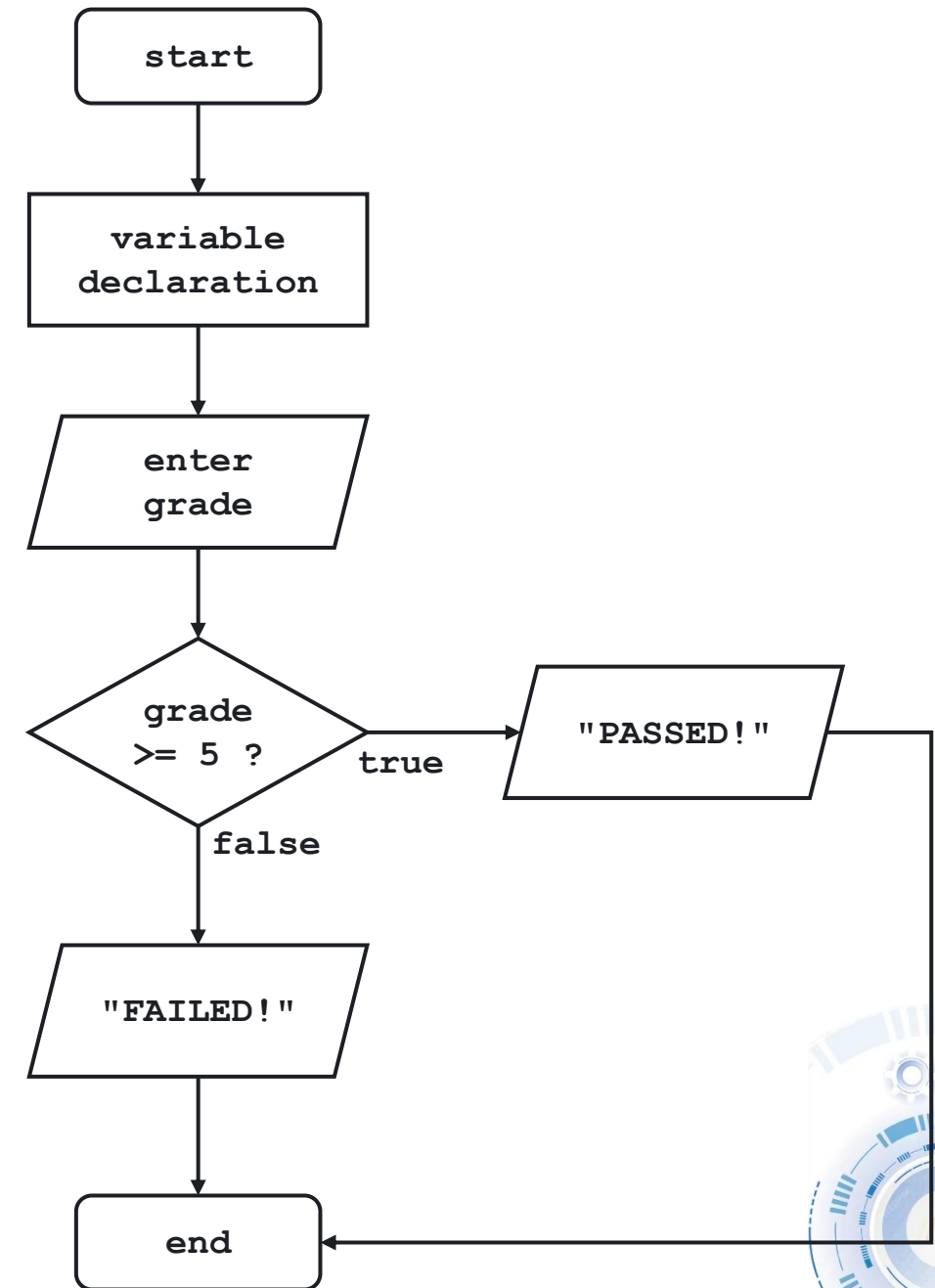
EXERCISE

```
if(grade >= 5.0 ){  
    cout << "PASSED!";  
}  
else{  
    cout << "FAILED!";  
}
```



EXERCISE

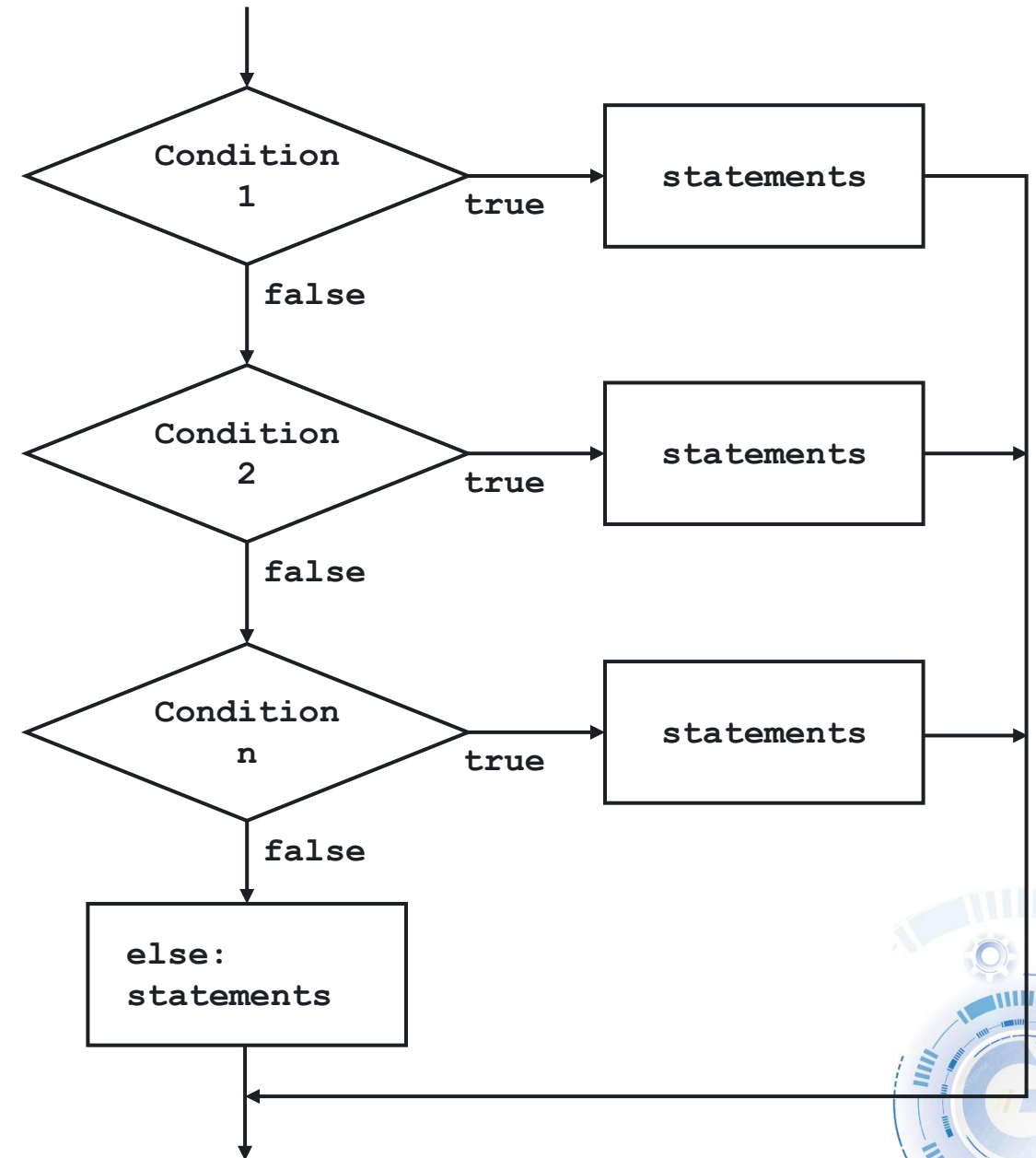
```
float grade = 0.0;  
  
// enter grade  
cin >> grade;  
  
// evaluate grade  
if (grade >= 5.0 ) {  
    cout << "PASSED!";  
} else {  
    cout << "FAILED!";  
}
```



CASCADING IF-ELSE STATEMENT

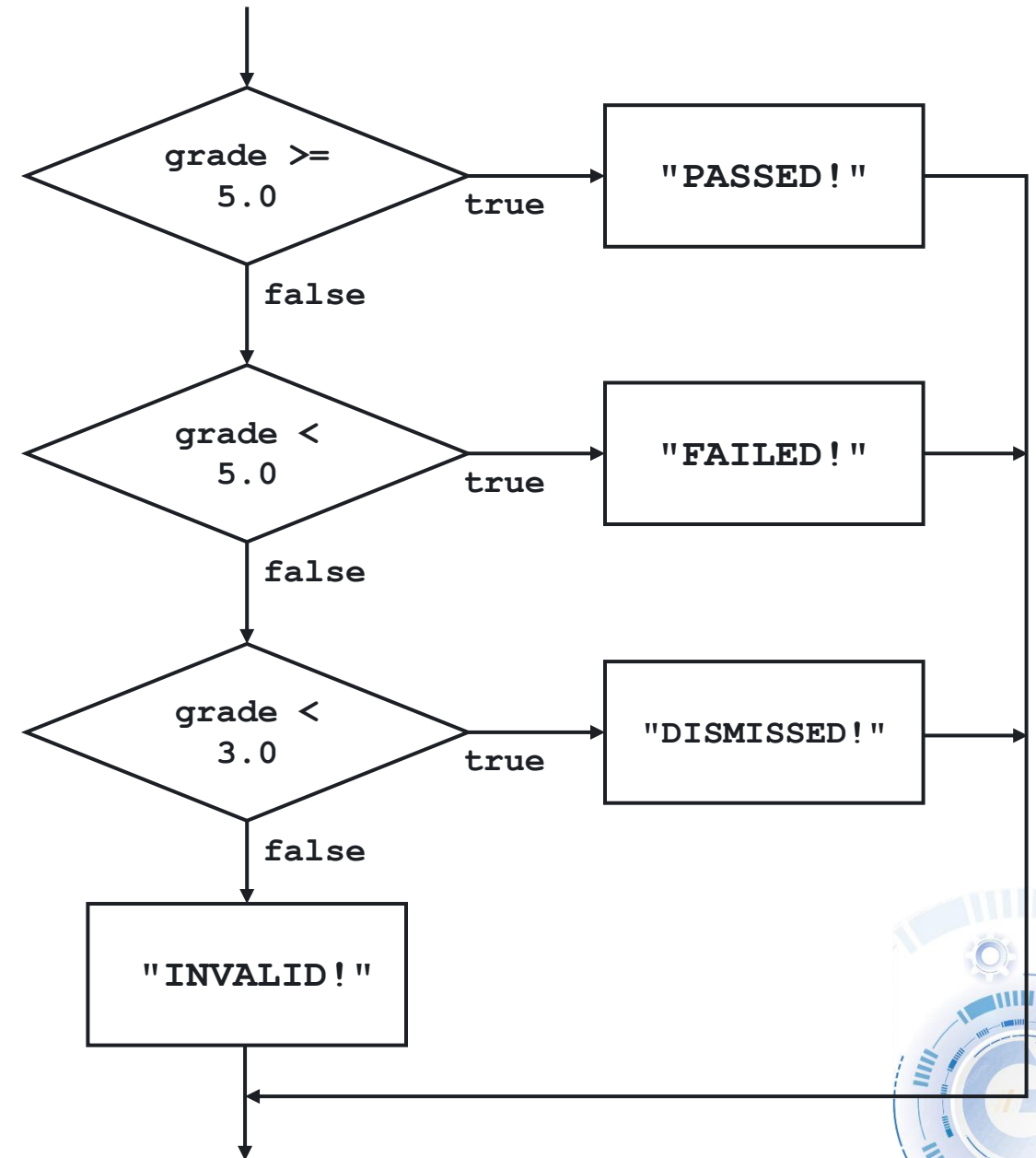
Syntax of the cascading if-else statement:

```
if(condition 1){  
    // if the condition 1 is true  
}  
  
else if(condition 2){  
    // if the condition 2 is true  
}  
  
else{  
    // if condition 1 and 2 are false  
}
```



EXERCISE

```
if(grade >= 5.0 ){  
    cout << "PASSED!";  
} else if(grade < 5.0){  
    cout << "FAILED!";  
} else if (grade < 3.0){  
    cout << "DISMISSED!";  
} else {  
    cout << "INVALID!";  
}
```



LABORATORY

