

# Booleans & selection

## Java Reference

### if / else

if runs a block when a condition 条件 is true; else if and else add more cases. The condition goes in ( ), the block in { }.

```
public class Main {
    public static void main(String[] args) {
        int score = 72;
        if (score >= 80) {
            System.out.println("A");
        } else if (score >= 60) {
            System.out.println("B");
        } else {
            System.out.println("fail");
        }
    }
}
```

### Logical operators & comparisons

Compare with ==, !=, <, >, <=, >= —a comparison 比较 gives a boolean. Combine with && (and), || (or), ! (not) —the logical operators 逻辑运算符. For Strings, use .equals(...), not ==.

```
public class Main {
    public static void main(String[] args) {
        int age = 16;
        boolean member = true;
        System.out.println(age >= 18 && member); // false
        String a = "hi";
        System.out.println(a.equals("hi")); // true
    }
}
```

### switch

switch chooses among many fixed values. Each case ends with break; default is the fallback.

```
public class Main {
    public static void main(String[] args) {
        int day = 3;
        switch (day) {
```

```
        case 1: System.out.println("Mon"); break;
        case 3: System.out.println("Wed"); break;
        default: System.out.println("other");
    }
}
```