# III / Conditions

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**=> Conditions using if statements**

Exemple :

```
let firstCard = 11
let secondCard = 10

if firstCard + secondCard == 21 {
    print("Blackjack!")
}
```

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**=> run if the condition is true with alternative code to run if the condition is *false*, using else**

Exemple :

```
if firstCard + secondCard == 21 {
    print("Blackjack!")
} else {
    print("Regular cards")
}
```

---

**=> conditions together using else if**

Exemple 1 :

```
if firstCard + secondCard == 2 {
    print("Aces – lucky!")
} else if firstCard + secondCard == 21 {
    print("Blackjack!")
} else {
```

```
    print("Regular cards")
}
```

Exemple 2 :

```
if score > 9000 {
    print("It's over 9000!")
} else if score == 9000 {
    print("It's exactly 9000!")
} else {
    print("It's not over 9000!")
}
```

Total score: 12/12 checked

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## Combining conditions

**=> Two special operators combine conditions together: they are && and  ||**

Check that the age of two people are both over a certain value :

Exemple 1 :

```
let age1 = 12
let age2 = 21

if age1 > 18 && age2 > 18 {
    print("Both are over 18")
}
```

Exemple 2 :

```
if isOwner == true && isEditingEnabled || isAdmin == true {
    print("You can delete this post")
}
```

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Evaluates as true if either item passes the test :

Exemple 1 :

```
if age1 > 18 || age2 > 18 {
    print("At least one is over 18")
}
```

Exemple 2 :

```
if isOwner == true || isAdmin == true {
    print("You can delete this post")
}
```

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Use parentheses to make the result clear:

```
if (isOwner == true && isEditingEnabled) || isAdmin == true {
    print("You can delete this post")
}
```

Total score: 12/12 checked

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## The ternary operator

**The ternary operator is a condition plus true or false blocks all in one**

Exemple 1 :

```
let firstCard = 11
let secondCard = 10
print(firstCard == secondCard ? "Cards are the same" : "Cards are
different")
```

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Exemple 2 :

```
let isAuthenticated = true
print(isAuthenticated ? "Welcome!" : "Who are you?")
```

Total score: 12/12 checked

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## Switch statements

**It list all possible outcomes and what should happen for each of them**

Exemple :

```
let weather = "sunny"

switch weather {
case "rain":
   print("Bring an umbrella")
case "snow":
   print("Wrap up warm")
case "sunny":
   print("Wear sunscreen")
default:
   print("Enjoy your day!")
}
```

NB : **default** – is required because Swift makes sure you cover all possible cases

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Use the **fallthrough keyword to Continue on the next case:**

Exemple :

```
switch weather {
case "rain":
   print("Bring an umbrella")
case "snow":
   print("Wrap up warm")
case "sunny":
   print("Wear sunscreen")
   fallthrough
default:
   print("Enjoy your day!")
}
```

- > Swift requires that its **switch** statements are exhaustive
- > Checking the same value repeatedly

Total score: 6/6 checked

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## Range operators

**Two ways of making ranges: the ..< and ... operators :**

Exemple 1 :

**1..<5** excluding the final value / **1...5** *including* the final value

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Exemple 2 :

```
let score = 85

switch score {
case 0..<50:
    print("You failed badly.")
case 50..<85:
    print("You did OK.")
default:
    print("You did great!")
}
```

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**= > print a range of values**

Exemple 3 :

```
let names = ["Piper", "Alex", "Suzanne", "Gloria"]

print(names[1...3])
```

**=> print one-sided range**

Exemple 4:

print(names[1...])

Total score: 6/6 checked