Conditional Statement

If condition :
    do this   *this lives inside*
else :
    do this   *this lives inside*

If else flowchart

```
                    Start
                      |
                      v
        No   < Height > 120cm? >   Yes
        |                           |
        v                           v
    Can't ride                  Can ride
```

Want to include 120 $>=$ 120

Comparison operator $<=$

equal to precisely $==$

Modulo $\%$
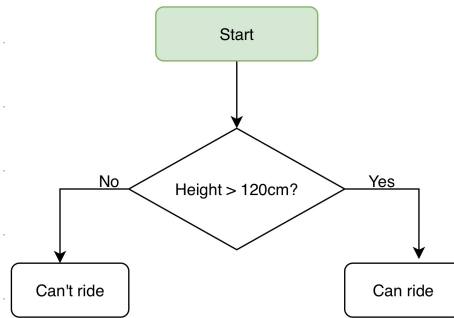
7 % 2   2 2 2 1

Ans = 1 → Remainder

Nested   Once first condition passed check other cond

Both Cond needs to be true

If else flowchart

```
              ┌─────────┐
              │  Start  │
              └────┬────┘
                   │
                   ▼
        No    ╱─────────────╲   Yes
      ┌───────│ Height > 120cm? │───────┐
      │       ╲─────────────╱           │
      ▼                                 ▼
┌───────────┐                     ┌───────────┐
│ Can't ride│                     │  Can ride │
└───────────┘                     └─────┬─────┘
                                        │
              ┌─────────────────────────▼─────────────────────────┐
              │  Under 12      ╱──────╲      Over 18               │
              │ ┌─────────────│  age  │─────────────┐             │
              │ │              ╲──────╱              │             │
              │ │                 │ 12-18            │             │
              │ ▼                 ▼                  ▼             │
              │ ┌─────┐       ┌─────┐           ┌─────┐           │
              │ │ $5  │       │ $7  │           │ $12 │           │
              │ └─────┘       └─────┘           └─────┘           │
              └───────────────────────────────────────────────────┘
```
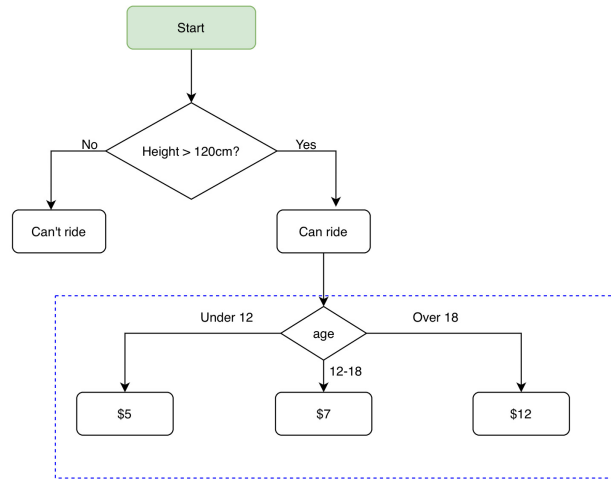
condition 1

↓ If true

DO   A

↓ Not true

Check Cond elif

↓   elif:
     DO B

If non condition true
     else

elif age

```
elif age <= 18:
    print("     ")
```

#4

```
ht = float
wt = float
bmi = (wt/ht²)
print(bmi)
if bmi < 18.5:
    print("under")
elif bmi > 18.5 and bmi < 25:
    print("normal")
```

If elif else

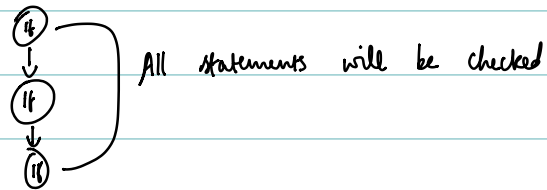```
if condition 1 :
    do A
if condition 2:
    do B
else:
    Do C
```

add $3 to bill

```
bill += 3
```

Python Indentation

very important

All statements will be checked

If If If

What Kind of pizza do you
want   S, M, L

```
If size == "S":
    bill += 5
```

multiple Condition same line
of code

```
if cond 1 & cond2& cond 3:
    do this
else:
    do this
```

&& → Both Conditions | and

|| | or

! | not

  | a = 12

  | not a > 15

  | True

. lower | "Angela". lower ()

  | 'angela'

"Angela". count ("a") | counts number of times a mentioned in name