

Welcome back everyone

Agenda

⇒ Be on time

⇒ String formatting

⇒ Conditional Statement [if - elif - else]

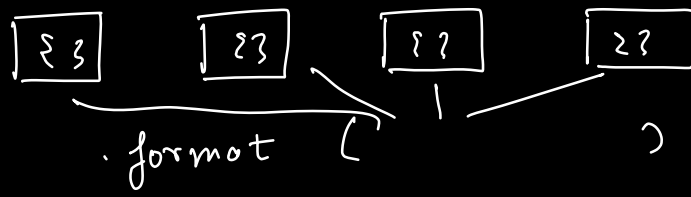
String formatting

Problem \Rightarrow we have variables which
have some value of imp.

a, b, c

sum, result

print () \Rightarrow screen



Decision Control Statement

In our real life as well as in Industry,
we have lots of situation where we
take/ decision based on some condition
Control

Real life	Industry
eat if <u>hungry</u> else play	pay if you order else no
walk if <u>you have to go</u> else stay	adding money if wallet is empty. else no.

decision control statements are those statements
which decide the flow of our program



it allows us to decide whether a particular
part of our program should run or not
based on some condⁿ

eg: $\text{marks} > 40$
 _____ pass
 else _____ fail

4 decision control statement:

- if
- if else
- if - elif (else if) . - else
- nested if

if statement

↳ if hungry:
 eat

if statement is like in other
language C++ / Java

It is used to check if something needs
to run.

Syntax;

if (condition)

should be
true for statements
to run

⚠ important

---- statement 1

---- statement 2

---- statement 3

normal code

Python does not
use {}

indentation is tab or 4 spaces

statements run only when condition
is True.

Indentation ÷

If statement

```
[2]: hungry = True
```

```
[7]: hungry = 0
```

```
if hungry :  
    print("order Biryani")  
  
print("eat it")
```

eat it

```
[8]: hungry = False
```

```
# Tab or 4 spaces
```

```
if hungry :  
    print("order Biryani")  
    print("eat it")  
    print("now I am not hungry")
```

If - Else Statement

if (Condition) :

====

else :

====

When condⁿ is false

else block gets
executed.

Indentation used to
separate our blocks.

★ Indentation & colon are important

If - else if statement

elif \Rightarrow else if

It allows us to check for multiple
conditions

If condⁿ for if is false, then
we check elif condⁿ

If all condⁿ are false then
else is executed.

Syntax :

if (condⁿ 1) :

elif (condⁿ 2) :

elif (condⁿ 3) :

else :

```
marks = 40
```

```
if (marks >= 80):  
    print("your grade is A")  
    print("you can eat biryani as you are pass")  
elif (marks >=60 and marks <80):  
    print("your grade is B")  
    print("you can eat cake as you are pass")  
elif (marks >=40 and marks <60):  
    print("your grade is C")  
    print("you can eat salad as you are pass")  
elif marks >=40 and marks < 50 :  
    print("your grade is D")  
    print("you can eat dal at home")  
else:  
    print("your result is FAIL")  
    print("you to drink water only")
```

```
your grade is C  
you can eat salad as you are pass
```

Nested if statement

1. Hungry & money

2. coupon & payment/cord

if coupon:

if _____

if paid customer

_____ gold
_____ silver
_____ bronze

if netflix - acc:

if mobile

_____ don't play

elif mobile + tv

_____ don't play on
big screen

else

_____ play everywhere.

Nesting of statement

Indentation is our biggest friend here

Any number of these statement can be nested

Syntax

```
if (condn):  
    if (condn internal):  
        _____  
        _____  
        _____  
    elif (condn internal 2):  
        _____  
        _____  
        _____  
elif (condn 2):  
    if (_____)  
        _____  
        _____
```

```
hungry = False
money = 100

if (hungry):
    print("you are hungry")
    if money >= 400:
        print("go to restro")
    elif money >= 200 and money <400:
        print("order in")
    else:
        print("will put a towel on stomach and sleep")
else:
    print("you are not hungry")
    if(money>0):
        print("Invest it")
    else:
        print("sleep")
```

```
you are not hungry
Invest it
```

% operator

divisibility test

number

If remainder is 0 when a/b
then a is divisible by b

$$300/400 \Rightarrow$$

$$\begin{array}{r} 0 \\ 400 \overline{) 300} \\ \underline{0} \\ 300 \\ \underline{0} \\ 300 \\ \underline{0} \\ 300 \\ \underline{0} \\ 300 \\ \underline{0} \\ 300 \end{array}$$

remainder

$$25\%4 \Rightarrow$$

remainder

$$37\%12$$

$$38\%12 \Rightarrow$$

$$40\%11$$

$$\begin{array}{r} 3 \\ 11 \overline{) 34} \\ \underline{33} \\ 1 \end{array}$$