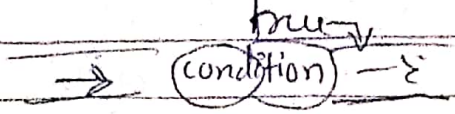
Day 14 : Conditional Statements

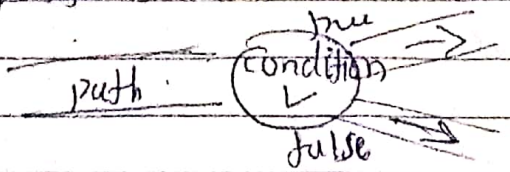
1) why we need conditional statements

⇒ conditional statements are decision makers in programming it decide what can do for specific task.

H pattern 1 if() eg: if (age>18):
"yes eligible to vote"

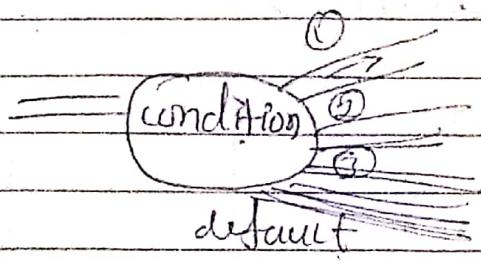


H pattern 2 ifelse() eg: if (amount>0) &&
(amount<1lakh):
"allow to pay"
else: "not allow"



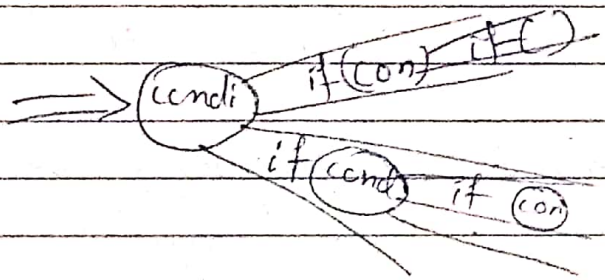
H pattern 3 ifelseif : in py ifelifelse

if (marks>75): "distinction"
elif (marks>60): "first class"
elif (marks>35): "pass"
else: "Fail"



H pattern 4 nested if else

eg: train ticket
if (ticket):
if (birth>1):
if (lower birth):
"reserved"



eg: voting application
if (age>18):
if (adhar):
if (voter id):

Amazon company issue : shopping cart

windows blue screen of death (crowdstrike) antivirus

2) Conditional Statement

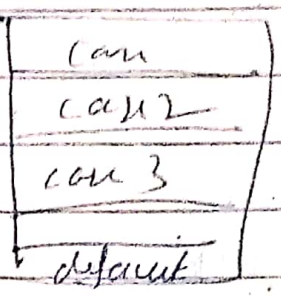
result
is_positive : (num>0) ? True : False

```
if (num>0){
    ispositive = True;
}else{
    ispositive = False;
}
```

3) Switch cases / match in py

input = 3

```
switch(opeminput){
case 1:
case 2:
case 3:
default:
    "invalid"
```

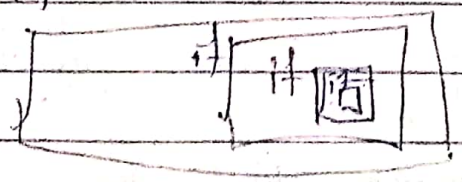


direct call

4) How to write clean & clear conditional statement

fun :

```
if ()
```



func(arg, arg, arg, ...): clean

if (input is wrong): clean
return

logic:

code

Sample examples

example number is positive

① number = 10
if (number > 0):
print("Number is positive")
else:
print("Number is negative")

② else if elif in py

number = 0
if (number > 0):
print("Number is positive")
elif (number < 0):
print("Number is negative")
else:
print("Number is zero")

③ def getClassForPercentage(percentage: float) -> str:
if (percentage >= 75):
return "Distinction"
elif (percentage >= 60):
return "First Class"
elif (percentage >= 50):

```
        return "Second class"
    elif (percentage >= 35 :
        return "Pass
    else :
        return "Failed"
```

③ invocation a function

```
student1_percentage = 76
result = getClassForPercentage (student1_percentage
print(result)
```

④ convert digit to a month name

```
def get_month_name(month: int) -> str:
    match (month):
        case 1 :
            return "January"
        case 2 :
            return "February
        case 3 :
            return "March"
        case 4 :
            return "June"
        case 5 :
            return "May"
        case _ :
            return "None of option < 6 and
                                > 0"
```

5) greater or smaller using conditional operator

```
number = -1
result = "Greater or equal to zero" if (number >= 0
                else "Less than zero"
print(result
```