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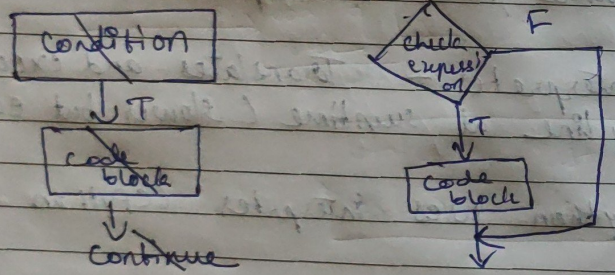
Conditional statements

- Conditional statements in Python are used to make desion in a program.
- Types :-
  1) if
  2) if else
  3) if else ladder (elif)
  4) nested if else

1) if syntax :-

```
if (condition):
    statements
```

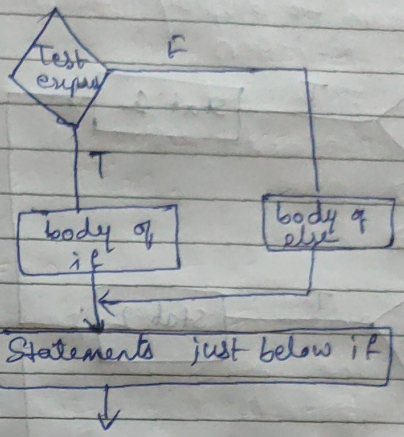
Flow chart :-



2) if else syntax :

```
if (condition):
    Statements of if
else:
    statements of else.
```

Flow chart :



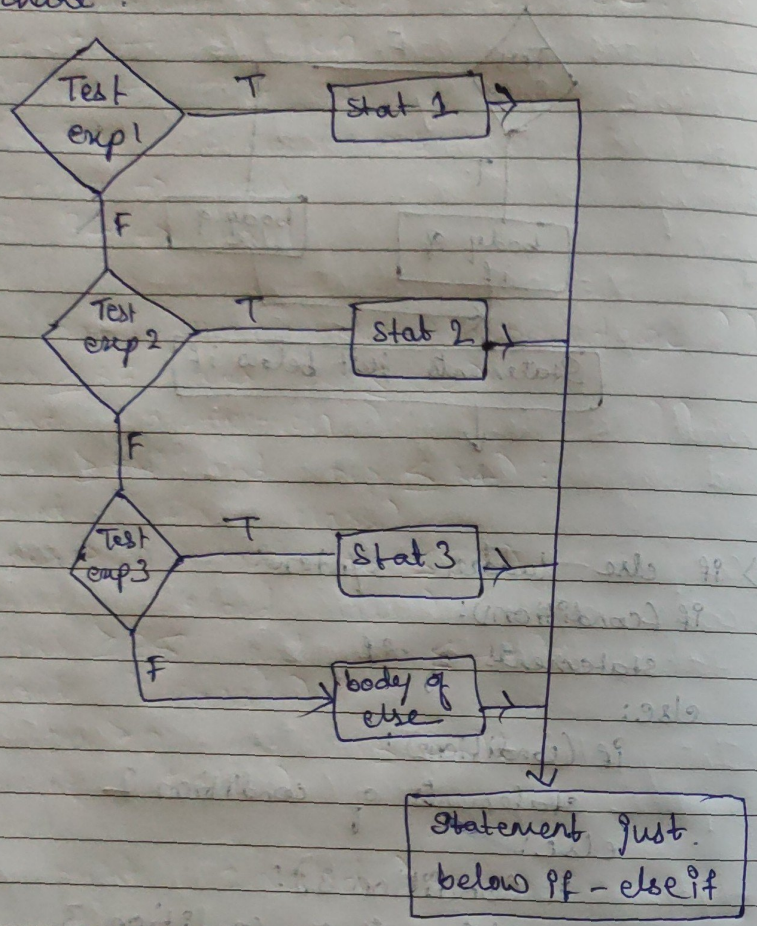
3) if else ladder syntax :

```
if (condition):
    statements of if
else:
    if (condition2):
        statements of condition 2
    else:
        if (condition 3):
            statements of condition 3
        else:
            default statements
```

elif format :

```
if (cond 1):
    stat of if
elif (cond 2):
    stat of cond 2
elif (cond 3):
    stat of cond 3
else:
    default statements
```

Flow chart :



eg programs :-

if Statement :-

→
```
age = int(input("enter age"))
country = input("enter country")
if(age>=18 and country.lower()=="india"):
print("eligible")
```

if-else :-

→
```
age = int(input("enter age"))
country = input("entry country")
if(age≥18 and country.lower()=="india"):
    print("eligible")
else:
    print("not eligible")
```

elif :-

→ Write a program to display age group based on their age.

1 - 10 → children
11 - 18 → teenage
19 - 40 → adult
above 40 → old age

```
age = int(input("enter your age"))
if(age≥1 and age≤10):
    print("children")
elif(age≥11 and age≤18):
    print("teenage")
elif(age≥19 and age≤40):
    print("adult")
elif(age≥40 and age≤120):
    print("old age")
else:
    print("Invalid")
```

o/p: age = 82
old age.

→ Write a program to display percentage.

85 - 100 → Distinction
60 - 84 → First class
50 - 59 → Second class
35 - 49 → pass
0 - 34 → Fail

```
per = float(input("Enter your percentage"))
if(per >= 85 and per <= 100)
    print("distinction")
elif(per >= 60 and per <= 84):
    print("First class")
elif(per >= 50 and per <= 59):
    print("second class")
elif(per >= 35 and per <= 49):
    print("pass")
elif(per >= 0 and per <= 34):
    print("Fail")
else:
    print("Invalid")
```

o/p: per = 85
Distinction.