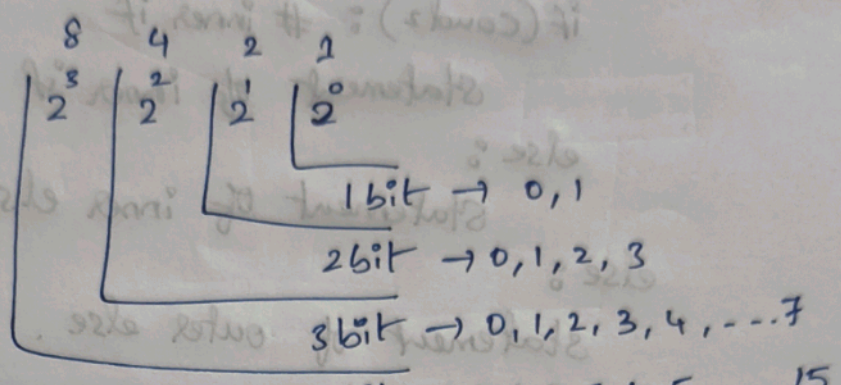
10/09

```
* units = int(input("enter num of units used:"))
if(units<0):
    print("invalid input")
elif(units>=0 and units<=100):
    eb=units*0.5
    print(f"for {units} units the electricity bill is {eb}$")
elif(units>=101 and units<=200):
    du=units-100
    eb=(100*0.5)+(du*0.75)
    print(f"for {units} units the electricity bill is {eb}$")
elif(units>200):
    du=units-200
    eb=(100*0.5)+100*0.75)+(du*1)
```

print(f"for {units} units the electricity bill is {eb}$")

7) Bitwise operators :-

& | ~ >> <<



2^0 => 1

0 → 0

1 → 1

2	1	
2^1	2^0	
0	0	→ 0
0	1	→ 1
1	0	→ 2
1	1	→ 3

4	2	1	
2^2	2^1	2^0	
0	0	0	→ 0
0	0	1	→ 1
0	1	0	→ 2
0	1	1	→ 3
1	0	0	→ 4
1	0	1	→ 5
1	1	0	→ 6
1	1	1	→ 7

12 => 1 1 0 0

5 => 0 1 0 1

| => 1 1 0 1 = 13

& => 0 1 0 0 = 4

13 => 1 1 0 1

1 1 0 1 0

1 1 0 1 0 0

32 16 8 4 2 1

13 << 2 = 52

13 => 1 1 0 1

1 1 0 → ignore

1 1 [0 1] → ignore

13 >> 2 = 3

Conditional Statements :-

* Nested if else :

Syn :-

```
if (cond1) :  # outer if
    if (cond2) :  # inner if
        statement of inner if
    else :
        statement of inner else
else :
    statement of outer else.
```

Ex :-

```
n = int (input())
if (n>=0) :
    if (n>0) :
        print ("+ve")
    else :
        print ("zero")
else :
    print ("-ve")
```