

A1	O - 3L	- 0%	$B1 \ O - 30K \rightarrow 10\%$
A2	3L - 6L	- 10%	$B2 \ 30K - 90K \rightarrow 20\%$
A3	6L - 9L	- 20%	$B3 \ > 90K \rightarrow 30\%$
A4	> 9L	- 30%	

Eg. ① 900,000 - Tax amt.

$$B3 \rightarrow \frac{90,000}{30} \times 100 = 3L$$

$$\therefore \text{in } B3, TS = 3L + 6L + 1L \\ = 10L$$

Eg. ② 1,50,000 - TA

$$B3 \rightarrow \frac{1,50,000 - 90,000}{30} \times 100 = \frac{60,000}{30} \times 100 = 2L$$

~~$\therefore \text{in } B3, \text{amt left} = 1,50,000 - 60,000 = 90,000$~~

$$\text{Again, } B3 \rightarrow \frac{90,000}{30} \times 100 = 3L$$

$$\therefore \text{in } B3, TS = 2L + 3L + 6L + 1L \\ = 12L$$

Eg. ③ 2,10,000 - TA

$$B3 \rightarrow \frac{2,10,000 - 90,000}{30} \times 100 = \frac{1,20,000}{30} \times 100 = 4L$$

$$\text{Amt left} = 2,10,000 - 1,20,000 = 90,000$$

$$\text{Again, in } B3 \rightarrow 3L \quad \therefore TS = 4L + 3L + 6L + 1L = 14L$$

Eg. ④ 3,00,000 - TA

$$B3 \rightarrow \frac{3,00,000 - 90,000}{30} \times 100 = \frac{2,10,000}{30} \times 100 = 7L$$

$$\text{Amt left} \rightarrow 90,000 \rightarrow 3L$$

$$\text{Again, in } B3 \rightarrow TS = 7L + 3L + 6L + 1L = 17L$$

$$\text{Total} = 53L$$

~~3 size~~ 3L \rightarrow 6L \rightarrow 9L 0
3 size 3L 3L 3L 0

0 LL 0 3L 6L 9L GL
, UL 3L 6L 9L 0

2 % 0 10 20 30

5 TUL 0 0 30k 90k
6 TUL 0 30k 90k 0

Enter no. of slabs: 6

Enter UL of S1: 2000

Enter UL of S2: 3000

Enter UL of S3: 4000

Enter UL of S4: 6000

Enter UL of S5: 8000

Enter tax p of S2: 5

Enter tax p of S3: 10

Enter tax p of S4: 20

Enter tax p of S5: 30

Enter tax p of S6: 40

0	2000	3000	4000	6000	8000
2000	3000	4000	6000	8000	0
0	5	10	20	30	40
2000	1000	1000	2000	2000	0
2000	3000	4000	6000	8000	0
0	0	50	150	550	1150
0	50	150	550	1150	0

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```
1 #include<stdio.h>
2 #include<conio.h>
3 long long int table[7][10], x, rebate;
4 int getSlabS(long long int sal)
5 {    int i;
6
7     for(i=0 ; i<x ; i++)
8         if(sal > table[0][i] && sal <= table[1][i])
9             return i;
10 }   return x-1;
11 int getSlabT(long long int sal)
12 {    int i;
13
14     for(i=0 ; i<x ; i++)
15         if(sal > table[5][i] && sal <= table[6][i])
16             return i;
17 }   return x-1;
18 long long int calcTax(long long int sal)
19 {    int slab;
20
21     long long int tax=0;
22     if(sal<=rebate) return 0;
23     else sal-=rebate;
24     slab=getSlabS(sal);
25     if(slab>0)
26     {    tax = table[6][slab-1];
27         sal -= table[1][slab-1];
28     }
29     tax += (sal*table[2][slab])/100;
30 }   return tax;
31 long long int calcSal(long long int tax)
32 {    int slab=getSlabT(tax);
33
34     long long int sal=0;
35     if(slab>0)
36     {    sal = table[1][slab-1];
37         tax -= table[6][slab-1];
38     }
39     sal += (tax*100)/table[2][slab];
40 }   return sal>0 ? sal+rebate : sal;
41 void pTable()
42 {    int i, j;
43
44     for(i=0 ; i<7 ; i++)
45     {    for(j=0 ; j<x ; j++)
46         printf("%lld\t", table[i][j]);
47         printf("\n");
48     }
49 void main()
50 {    long long int i, j, t, z;
51
52     char f;
53     clrscr();
54
55     printf("Enter no. of slabs: ");
56     scanf("%lld", &x);
57 }
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58     t = table[0][0] = table[1][x-1] = 0;
59     for(i=0 ; i<x-1 ; i++)
60     {   printf("Enter UL of S%d: ", i+1);
61         scanf("%lld", &table[1][i]);
62         table[0][i+1] = table[1][i];
63
64         table[3][i] = table[1][i] - t;
65         t = table[1][i];
66     }
67     table[3][i] = 0;
68
69     table[2][0] = 0;
70     table[4][0] = table[3][0];
71     for(i=1 ; i<x ; i++)
72     {   printf("Enter tax p of S%d: ", i+1);
73         scanf("%lld", &table[2][i]);
74
75         table[4][i] = table[3][i] + table[4][i-1];
76     }
77     table[4][i-1] = 0;
78
79     printf("Enter rebate amount: ");
80     scanf("%lld", &rebate);
81
82     table[5][0] = table[6][0] = table[6][x-1] = 0;
83     for(i=1 ; i<x ; i++)
84     {   table[5][i] = table[6][i-1];
85         table[6][i] = (((table[1][i] - table[4][i-1])*table[2][i])/100) + table[5]
86 [i];
87     table[6][i-1] = 0;
88
89     printf("\nPress t to calculate tax or s to calculate salary or q to exit...");
90     do
91     {   printf("\nChoice: ");
92         f=getche();
93         if(f=='t')
94         {   printf("\nEnter salary: ");
95             scanf("%lld", &z);
96             printf("Tax = %lld\n", calcTax(z));
97         }
98         else if(f=='s')
99         {   printf("\nEnter tax: ");
100            scanf("%lld", &z);
101            printf("Salary = %lld\n", calcSal(z));
102        }
103    }while(f=='t'||f=='s');

```