

③	$5 \neq 0$	$D = 13 \% 10$ $= 3$	$Q = 13 / 10$ $= 1$	$D = 3 * 10$ $= 30$	$A = 30 + 7$ $= 37$	$A = 37 + 1$ $= 38$	$B = 5 -$ $= 4$
④	$4 \neq 0$	$D = 32 \% 10$ $= 2$	$Q = 32 / 10$ $= 3$	$D = 2 * 10$ $= 20$	$A = 20 + 3$ $= 23$	$A = 23 + 1$ $= 24$	$B = 3 -$ $= 2$
⑤	$3 \neq 0$	$D = 24 \% 10$ $= 4$	$Q = 24 / 10$ $= 2$	$D = 4 * 10$ $= 40$	$A = 40 + 8$ $= 48$	$A = 48 + 1$ $= 49$	$B = 2 -$ $= 1$
⑥	$2 \neq 0$	$D = 19 \% 10$ $= 9$	$Q = 19 / 10$ $= 1$	$D = 9 * 10$ $= 90$	$A = 90 + 1$ $= 91$	$A = 91 + 1$ $= 92$	$B = 1 -$ $= 0$
⑦	$1 \neq 0$	$D = 95 \% 10$ $= 5$	$Q = 95 / 10$ $= 9$	$D = 5 * 10$ $= 50$	$A = 50 + 9$ $= 59$	$A = 59 + 1$ $= 60$	$B = 0 -$ $= -1$
⑧	$0 = 0$						

In the 8th iteration the B value become 0 then the false block print A is return as a result that is 62

3)

Given :-

$$P = 5$$

$$Q = 8$$

$$r = 4$$

$\text{if } ((r \wedge q) < (10 + P))$  [here  $\wedge$  stands for Bitwise XOR operator so perform Bit-wise XOR operation on 5 and 9.]

$$5 = 0101$$

$$(XOR) 9 = 1001$$

$$P \wedge Q = \underline{1100} = 12$$

$$\begin{aligned} &= 10 + P \\ \text{And } 10 + 5 &= 15 \end{aligned}$$

$\text{if } ((12 < 15))$  The statement of condition is true then we perform

$$P = Q + Q$$

$$\text{that is, } P = 8 + 8 = 16$$

10/1/24

TNSIF Program

Task - 1

1) Given:

$M = 30$

$N = 248$

$P = 1$

Here the condition to check is  $N \neq 0$ We have  $N = 248 \neq 0$  so the condition is true then the True block is started to execute and return as a output

No. Iteration	Condition $N \neq 0$	$P = N \times 10$	$M = M + N \times P$	$N = N / 10$	output Value of M/N/P
1	true $248 \neq 0$	$P = 248 \times 10$ $= 8$	$M = 30 + 248 \times 8$ $= 30 + 0$ $= 30$	$N = 248 / 10$ $N = 24$	30 24 8
2	After 1st Iteration $N = 24 \neq 0$	$P = 24 \times 10$ $= 4$	$M = 30 + 24 \times 4$ $= 30 + 0$ $= 30$	$N = 24 / 10$ $= 2$	30 2 4
3	Then $N = 2 \neq 0$	$P = 2 \times 10$	$M = 30 + 2 \times 2$ $= 30 + 0$ $= 30$	0	30 0 2
4	$N = 0 = 0$				

In The 4<sup>th</sup> Iteration the N value become 0 then the false block is return as a result, that is  $M = 30$

2) A Given

$A = 62$

$B = 7$

condition to check  $B \neq 0$ . Here the condition is true so the True block is started to execute

No. of Iteration	$B \neq 0$	$D = A \times 10$	$Q = A / 10$	$D = D \times 10$	$A = D + Q$	$A = A + 1$	$B = B - 1$
①	$7 \neq 0$	$D = 62 \times 10$ $= 2$	$Q = 62 / 10$ $= 6$	$D = 2 \times 10$ $= 20$	$A = 20 + 6$ $= 26$	$A = 26 + 1$ $= 27$	$B = 7 - 1$ $= 6$
②	$6 \neq 0$	$D = 27 \times 10$ $= 7$	$Q = 27 / 10$ $= 2$	$D = 7 \times 10$ $= 70$	$A = 70 + 2$ $= 72$	$A = 72 + 1$ $= 73$	$B = 6 - 1$ $= 5$

$$\text{add, } p+q+r = 16+9+4 \\ = 29$$

4) Given  $a=6$   
 $b=7$

if  $(4 > 6 \text{ \& \& } 6 > 3)$

$(T \text{ \& \& } T) = \text{True}$

Then

$$a = (7+1) + 6 \\ = 8+6 \\ = 14$$

$$b = 1+3+14 \\ = 18$$

Return  $14 - \text{fun}(18, 18)$

$$= 14 - 17$$

O/p = -3

Again the function is called  
this time the if condition  
is getting false ( $18 > 6 \text{ \& \& } 18 > 3$ )  
so the else part is executed  
Then  $18 - 1 = 17$ .

5) Given  $a=3$

$b=4$

$c=10$

$a = 10 + b$

$a = 10 + 4$

$a = 14$

if  $((14+4+10) < (4+10+14)) = 28 < 28$

is False.

Then move on to next line of the program

if  $((4+14+7) < (5+10+7))$

$25 < 19$  is also false

Then move on to next line of the program

else part  
if  $((4+10) < (10-4))$

$14 < 6$  is also  
false

Then the control  
move on to the  
last statement of the  
program.

Print  $a+b+c$

$= 14+4+10$

$= 28$

O/p :-

28