

$$\text{Add, } p+q+r = 16+8+4 \\ = 28$$

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

if  $(7 > 6 \text{ \& } 6 > 3)$

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

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

3	$5 \neq 0$	$D = 13 \% 10$ $= 3$	$Q = 13 / 10$ $= 1$	$D = 3 * 10$ $= 30$	$A = 30 + 7$ $= 37$	$A = 37 + 1$ $= 38$	$B = 5 - 1$ $= 4$
4	$4 \neq 0$	$D = 32 \% 10$ $= 2$	$Q = 32 / 10$ $= 3$	$D = 2 * 10$ $= 20$	$A = 30 + 3$ $= 33$	$A = 33 + 1$ $= 34$	$B = 3 - 1$ $= 2$
5	$3 \neq 0$	$D = 24 \% 10$ $= 4$	$Q = 24 / 10$ $= 2$	$D = 4 * 10$ $= 40$	$A = 40 + 3$ $= 43$	$A = 43 + 1$ $= 44$	$B = 2 - 1$ $= 1$
6	$2 \neq 0$	$D = 49 \% 10$ $= 9$	$Q = 49 / 10$ $= 4$	$D = 9 * 10$ $= 90$	$A = 44 + 1$ $= 45$	$A = 45 + 1$ $= 46$	$B = 1 - 1$ $= 0$
7	$1 \neq 0$	$D = 95 \% 10$ $= 5$	$Q = 95 / 10$ $= 9$	$D = 5 * 10$ $= 50$	$A = 46 + 5$ $= 51$	$A = 51 + 1$ $= 52$	$B = 0 - 1$ $= -1$
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 52

3)

Given :-

$$P = 5$$

$$Q = 8$$

$$r = 4$$

$\frac{1}{4} ((r \wedge q) < (10 + P))$  [here  $\wedge$  stands for Bitwise XOR operator so perform Bit-wise XOR operation on 5 and 9.]

$$\begin{array}{l} 5 = 0101 \\ (XOR) \quad 9 = 1001 \\ \hline P \wedge Q = 1100 = 12 \end{array} \quad \left| \begin{array}{l} = 10 + P \\ \text{And } 10 + 5 \\ = 15 \end{array} \right.$$

$\frac{1}{4} ((12 < 15))$  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 Values 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 1 <sup>st</sup> 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	$6 \neq 0$	$D = 27 \times 10$ $= 7$	$Q = 27 / 10$ $= 2$	$D = 7 \times 10$ $= 70$	$A = 70 + 2$ $= 72$	$A = 72 + 1$ $= 73$	$B = 6 - 1$ $= 5$