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**Q1. ODD EVEN NO.**

Step1 – START

Step 2 – Take input num, assign ans = 0

Step 3 – ans = num %2

Step 4 – Condition if (num % 2 = = 0)

If yes ->Print EVEN NUMBER

Else No -> Print ODD NUMBER

Step 5 – STOP

**Q2. FACTORIAL OF GIVEN NUMBER**

Step1 – Start

Step 2 – Take input n; read n = 1; f = 1;

Step 3 – while condition : i<= n

f = f \* i

I = I + 1

Step 4 - print Prime factorial\

Step 5 – End

**Q3. LEAP YEAR**

Step1 – Start

Step 2 – Take input of year

Step 3 – If (year%100 != 0 && year % 4 == 0)

Yes -> print LEAP YEAR

Step 4 – else if (year % 400 == 0)

Yes -> print NON LEAP YEAR

Step 5 – else -> print NON LEAP YEAR

Step 6 – Stop

**Q4. ADDITION WITHOUT ARITHMETIC OPERATOR**

Step 1 – Start

Step 2 – assign i = 0; take input n1; n2;

Step 3 – for ( i=0; i<=n2; i++)

n1++;

Step 4 – print n1;

Step 5 – Stop

**Q5. POSTIVE NUMBER OR NEGATIVE NUMBER**

Step 1 – Start

Step 2 – input no;

Step 3 – If n>=0;

Print POSITIVE NUMBER

Step 4 – Print NEGATIVE NUMBER

Step 5 – Stop

**Q6. SWAPPING WITHOUT 3RD VARIABLE**

Step 1 – Start

Step 2 – input num1; num2;

Step 3 - num 1 = num 1 + num 2

num 2 = num 1 + num 2

num 1 = num 1 – num 2

Step 4 – print num1 num2;

Step 5 – End

**Q7. PRINT 1 TO 10 WITHOUT LOOP**

Step 1 – START

Step 2 – declare I; Initialize n = 1;

Step 3 - print n,n++,n++,n++,n++,n++,n++,n++,n++,n++;

Step 4 – End

**Q8. SMALLEST NUMBER**

Step 1 – Start

Step 2 – input n1, n2, n3

Step 3 – if n1> n2 && n1>n3

YES -> N1 IS GREATEST

Step 4 – else if n2> n3

YES – N2 IS GREATEST

Step 5- else N3 IS GREATEST

Step 6 – Stop

**Q9. DIGITS OF A GIVEN NUMBER**

Step 1 – Start

Step 2 – i/p n;

Step 3 - while ( n == 0)

M = n % 10

N = n/10

Print m;

Step 4 - Stop

**Q10. FACTORS OF GIVEN NUMBER**

Step 1 – start

Step - read I = ; i/p n;

Step - for (i=;i<n;i++)

If num % I == 0

Print i

Step 4 – stop

.

**Q 11. SUM OF DIGITS**

Step 1 – start

Step 2 – read sum = 0; m = 0; i/p n;

Step 3 – while n!= 0

M = n%10

Sum = m + sum

N = n %10

Step 4 - Print SUM

Step 5 – Stop

**Q.12 REVERSE NUMBER**

Step 1 – start

Step 2 – i/p n; read digit = 0; rev = 0;

Step 3 - while (n!=0)

Digit = n%10

Rev = rev \* 10 + digit

N = n /10

Step 4 – Print rev

Step 5 – END

**Q 13. GCD**

Step 1 – Start

Step 2 – i/p n1;n2, read rem = 0;

Step 3 – while n1% n2 != 0

Rem = n1 % n2

N1 = n2

N2 = n1

Step 4 – print n2;

Step 5 -Stop

**Q 13. LCM**

Step 1 – Start

Step 2 – i/p n1;n2, read rem = 0; p = n1; q = n2, gcd, lcm

Step 3 – while n1% n2 != 0

Rem = n1 % n2

N1 = n2

N2 = n1.

gcd = n2;

Step 4 – lcm = (p\*q)/gcd;

Step 5 -Stop

**Q 15. ODD NUMBER**

Step 1 – Start

Step 2 – read I = 1 ; i/p n;

Step 3 – for I = 1 ; i<=n i+2

Print I;

Step 4 – Stop

**Q 16. EVEN NUMBER**

Step 1 – Start

Step 2 – read I = 1 ; i/p n;

Step 3 – for I = 2 ; i<=n i+2

Print I;

Step 4 - Stop

**Q17. FACTORIAL USING RECURSION**

Step 1 - Start

Step 3 - Declare varible fact=1

Step 4 - Get a number from user

Step 5 - Call method facto(number) recursively until value of number>1

Step 5 - Print factorial

Step 6 - Stop

**Q18. CHECK PALINDROME OR NOT**

Step 1 - Start

Step 2 – I/P number

Step 3 – rev =0 ; rem=0

Step 4 – while (n !=0)

rem = num % 10;

rev = rev \* 10 + rem;

num /= 10;

Step 7 – if num == rev

Print NUMBER IS PALINDROME NUMBER

Else print NUMBER IS NOT A PALINROME NUMBER

Step 8 - Stop

**Q19. PRINT DIGITS OF GIVEN NUMBER**

Step 1 – start

Step 2 – i/p n; read digit = 0;

Step 3 - while (n!=0)

Digit = n%10

Rev = rev \* 10 + digit

N = n /10

Step 3 - while (n!=0)

Digit = n%10

N = n /10

Print digit ;

Step 5 – END