

HW:-

1) Check if a year is leap year or not

1) Take a year (y) as input

2) If ($y \% 400 == 0$)

Print y is a leap year

~~Else~~

~~Print y is not a leap year~~

Else

If ($y \% 100 == 0$)

Print y is not a leap year.

Else

If ($y \% 4 == 0$)

Print y is a leap year.

Else

Print y is not a leap year.

3) END.

2) Algorithm to calculate distance between 2 points

1) ~~Get~~ points P_1 & P_2 as input.

2) Set $x = x_2 - x_1$ and $y = y_2 - y_1$

3) Set $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} = P$

4) Print P

5) END.

3) write algorithm to print sum of even & odd digits, consider 10 numbers are taken from user.

1) Initialize Variable as Count & Sum.

2) Set Count = 0, Sum = 0.

3) for (i = 1 to 10).

Set Count = Count + 1

Set ~~Count~~^{rem} = ~~Count~~^{rem} % 2.

If (rem ~~==~~ 0)

Set ~~Sum~~ Sum = Sum + Count.

4) Print Sum.

5) End.

4) Calculate the product of digit of number.

1) Get ~~number~~^{ul & ll} in num.

2) set ~~pro~~^{num} = 1.

3) set Product = 1.

4) If (num ≤ ul)

set Product = Product * ~~num~~ⁿ.

set num = num + 1.

Else Print Product.

5) END.

5) WAP to Print first x terms of the series
⑤ $3N+2$ which are not multiples of 4. (Doubt)

6) Write algorithm to find Compound Interest, provide
 P , t & ROI taken by user.

1) Get Principle P , time t , ROI r .

2) Set $CI = P(1 + r/100)^t - P$

3) Print CI .

4) END.
