CDS assignment
(To be written in separate vssut notebook)

Q1. WAP to find simple interest & compound interest. Take the principal, rate & time as input from user
Q2. WAP to find the sum of natural numbers from 1 to 10 using for loop

Q3. WAP to take a year as input & check if it's a leap year or not (using ternary operator)

Q4. WAP to print the prime numbers within a range of number

Exercises

1. Write a program to print all natural numbers from 1 to n using loop.
2. Write a C program to print all alphabets from a to z. - using while loop
3. Write a C program to print all odd number between 1 to 100.
4. Write a C program to count number of digits in a number.
5. Write a C program to calculate sum of digits of a number.
6. Write a C program to find power of a number using for loop.
7. Write a C program to check whether a number is Prime number or not.
8. Write a C program to check whether a number is Armstrong number or not.
9. Write a C program to print Pascal triangle up to n rows.
10. Write programs for the following patterns:

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5
```

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```
1
2  3
4  5  6
7  8  9  10
11 12 13 14
15
```

```
*
**
***
****
*****
```

```
*
* *
* * *
* * * *
```

```
#include<stdio.h>
void main()
{
int i,j;
for(i=1;i<=4;i++)
{
 for(j=1;j<=i;j++)


}
}
```

Exercise

1. WAP to input the 3 sides of a triangle & print its corresponding type.
2. WAP to input the name of salesman & total sales made by him. Calculate & print the commission earned.

TOTAL SALES	RATE OF COMMISSION
1-1000	3 %
1001-4000	8 %
6001-6000	12 %
6001 and above	15 %

3. WAP to print the following series
   i. S = 1 + 1/2 + 1/3 ……..1/10

ii. P= (1*2) + (2 *3) + (3* 4)+…….(8 *9) +(9 *10)

iii. S = x + x2 + x3 + x4.....+ x9 + x10

iv. S = 1/1! + 1/2! + 1/3! ……+1/n!

v. S = 1 + x + x2/2 + x3/3…….+xn/n

4. Write a C program to print Fibonacci series up to n terms.
5. Write a C program to find frequency of each digit in a given integer.