① writ a program to print first N terms of a
~~fibonacci series~~

Ans
```c
#include<stdio.h>
int main()
{
        int    n,a=0,b=1,c=0;
        printf (" Enter  a number");
        scanf (" %d ", &n);
        for(i=1;i<=n;i++)
        {
                printf(" %d " , c);

                a=b;

                b=a

                c=a+b;
        }
                return 0;
}
```

Output: Enter a number 5

0 1 1 2 3

② write a program to calculate HCf of
two numbers.

③ write a program to display
(i) following patterns.

Ans. #include<stdio.h>
int main()
{
   int i,j;

   for(i=1 ; i<=4 ; i++)
    {
      for(J=1 ; J<=4 ; J++)
      {
        ~~Print~~ if (J>=5i)
          printf(" * ");
        else
          printf(" ");
        printf("\n");
    }
   }

i \ j	1	2	3	4
1				*
2			*	*
3		*	*	*
4	*	*	*	*

Ans #include<stdio.h>
int main()
{
   int i,j;
   for(i=1 ; i<= 4; i++)
   {
      for(J=1 ; J<= 7; J++)
      {
        if (~~i~~ J>=5i && J<=3+i)

          printf(" * ");

        else

          printf("   ");

        printf(" \n ");
    }
   return 0;
}

i \ J	1	2	3	4	5	6	7
1				*			
2			*	*	*		
3		*	*	*	*	*	
4	*	*	*	*	*	*	*

	1	2	3	4	5	6	7
1				1			
2			1	2	1		
3		1	2	3	2	1	
4	1	2	3	4	3	2	1

```c
#include<stdio.h>;
int main()

{

int i, j;
 int k=0;
 for(i=1; i<=4; i++)
 {

     k=0;
   & for(J=1; J<=7; J++)
     {
          if (J>=5-i && J<=3+i)
          {
            if(J>4)
                k--;
            else
                k++;
          }
          else  printf(" %-d", K);
          else
                print f("   ");
     }
     printf("\n");
}
}
```

⑤ #include < stdio.h>
int main()
{
    int i, j, k;

    for(i=1; i<=4; i++)
    {
        k='A'

        for(J=1; J<=4; J++)

            if (J<= 5-i)

                printf(" %-c" k++)

            else

                printf(,(" "));

    }

    printf(" \n");
    }

    return 0;

}

	1	2	3	4
1	A	B	C	D
2	A	B	C	
3	A	B		
4	A			

(6)

```c
#include<stdio.h>
int main()
{
    int i, j;
    char k;

    for(i=1; i<=4; i++)
    {
        k = 64
        for(j=1; j<=7; j++)
        {
            if(j>=i  && j<=8-i)
            {
                if(j>4)
                    k--;
                else
                    k++
                }
                printf("%c", k);
            else
                printf("  ");
        }
        printf("\n");
    }
    return 0;
}
```

	1	2	3	4	5	6	7
1	A	B	C	D	C	B	A
2		A	B	C	B	A	
3			A	B	A		
4				A			