

Assignment - 12:

1. // first n number in a Fibonacci Series

// 0 1 1 2 3 5 8 13 21 - - - -

```
#include <Stdio.h>
int main,
```

```
{
    int i, j, k, Sum
```

```
    printf("Enter the number = ");
```

```
    scanf("%d", &n);
```

```
    * while (k <= n)
```

```
    {
```

```
        Sum = i + j;
```

```
        printf("%d", Sum);
```

```
        i = j;
```

```
        j = Sum;
```

```
        k++;
```

```
    }
```

```
}
```

```
* i = 0;
```

```
j = 1;
```

```
printf("%d", i);
```

```
printf("%d", j);
```

2. // HCF of two number

```
#include <Stdio.h>
```

```
int main()
```

```
{
```

```
    int n1, n2, max
```

```
    printf("Enter two number = ");
```

```
    scanf("%d %d", &n1, &n2);
```

```
    if (n1 > n2)
```

```
        max = n1
```

```
    else
```

```
        max = n2
```

```
    while(1)
```

```
    {
        if (max % n1 == 0 & max % n2 == 0)
```

```
        {
            printf("HCF = %d", max);
```

```
        } break;
```

```
    }
```

```
    else
```

```
        max++;
```

```
}
```

```
}
```

```

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

```

#include <stdio.h>
int main()

```

```

{
    int i, j;
    for (i = 1; i <= 4; i++)
    {
        for (j = 1; j <= 4 - i; j++)
        {
            printf(" ");
            if (j <= 4 - i) if (j <= 5 - i)
                printf(" ");
            else
                printf("x");
        }
        printf("\n");
    }
}

```

```

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

```

#include <stdio.h>
int main()

```

```

{
    int i, j;
    for (i = 1; i <= 4; i++)
    {
        for (j = 1; j <= 7 - i; j++)
        {
            if (j <= 5 - i || j <= 3 + i)
                printf("x");
            else
                printf(" ");
        }
        printf("\n");
    }
}

```


iii)

```

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

```
#include <stdio.h>
```

```
int main()
```

```

{
    int i, j, k;
    for(i=1; i<=4; i++)
    {
        k=1;
        for(j=1; j<=4; j++)
        {
            if (j<=5-i && j<=3+i)
            {
                printf("%d", k);
                k++; j<=4? k++: k--;
            }
            else
                printf(" ");
        }
        printf("\n");
    }
}

```

iv)

```

A B C D
A B C
A B
A

```

```

i   j   j   j
1   1 2 3 1   j<=4   j<=5-i
2   1 2 3   j<=3
3   1 2   j<=2
4   1   j<=1

```

```
#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");
    }
}

```

A B C D E C B A
 A B C B A
 A B A
 A

```
#include <stdio.h>
```

```
int main()
```

```
{
  int i, j, k;
```

```
  for(i=1; i<=7; i++)
```

```
  {
    k='A';
```

```
    for(j=1; j<=4; j++)
```

```
    {
      if(j>=i && j<=8-i)
```

```
      {
        printf("%c", k);
```

```
        j<4? k++: k--;
```

```
      }
      else
```

```
        printf(" ");
```

```
    }
  }
  printf("\n");
}
```