**1.**

#include<stdio.h>

int main(){

    int rows,i,j;

    printf("Enter no of rows\n");

    scanf("%d",&rows);

    int count = 1;

    for(i=0;i<rows;i++){

        if(i == 0){

            printf("%d\n" , count);

            count++;

        }

        else{

            for(j=0;j<=2\*i;j++){

                if(j%2 == 0){

                    printf("%d ", count);

                }

                else{

                    printf("\* ");

                }

            }

            count++;

            printf("\n");

        }

    }

    return 0;

}

**2.**

#include<stdio.h>

int main(){

    int rows,i,j;

    printf("Enter no of rows\n");

    scanf("%d",&rows);

    for(i=0;i<rows;i++){

        for(j=0;j<=i;j++){

            if(i==j || (i%2 == 0 && j%2 == 0))

                printf("1 ");

            else

                printf("0 ");

        }

        printf("\n");

    }

    return 0;

}

**3.**

**Pointer**

**1. Pointer is a variable which stores the address of other variable**

**2. \*p = arr or p=&arr[0]**

**3. every element of arr can be accessed by using p++**

**Array**

**1. Array is a group of elements shares common name. Contiguous memory location is allocated**

**for elements of the array by the compiler**

**2. the base address is the location of the first element (index 0) of the array**

**3. can't access by arr ++ . it is wrong notation**