

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

```
void show_all_tubes(char mat[4][5])
{
    int i;
    for(i=0; i<=3; i++)
    {
        printf(" |%c|  |%c|  |%c|  |%c|  |%c|\n", mat[i][0], mat[i][1], mat[i][2], mat[i][3],
mat[i][4] );
    }
    printf("\n 1    2    3    4    5\n");
}
```

```
int check_winning(char mat[4][5] )
{
    // logic to check all columns having same values.

    // return 1 if winning situation found
    // otherwise return 0
    return 1;
}
```

```
void main()
{
    int from_tube, to_tube;

    char mat[4][5] = { {'R','R', 'Y', 'G', '\0'}, {'B', 'Y', 'G', 'G', '\0'}, {'Y', 'R', 'R', 'B', '\0'}, {'B', 'G',
'Y', 'B', '\0'} };
    clrscr();

    while(1)
    {
        show_all_tubes(mat);
        printf("Enter Tube number to POP from : ");
        scanf("%d", &from_tube);

        printf("Enter Tube number to PUSH into : ");
```

```

scanf("%d", &to_tube);

// Tube-1 is column-0
// tube-2 is column-1
// tube-3 is column-2
// tube-4 is column-3
// tube-5 is column-4

// write logic to POP from [from_tube - 1] and
// PUSH into [to_tube - 1]

// after this call to check_winning and receive
// returned value 1 or 0

// if 1 is returned then break the loop and declare winning
// if 0 is returned then nothing additional to do.
// loop will perform next iteration.

}
getch();

}

```