

Recursion

Input:

First line: n , a number ($1 \leq n \leq 10$).

Output:

Each line will contain a list of space-separated digits where,

- The list contains n digits.
- The digits in the list are 0-4 (inclusive)
- The odd indexed digit in the list is an odd digit
- The even indexed digit in the list is an even digit

The lists will be printed in sorted order. Example: {0, 1, 0} before {0, 1, 2}.

```
void func(int cur[], int l, int sz)
{
    if(l==sz) {
        for(int i =0;i<sz;i++) {
            if(i!=0)
                cout<<" ";
            cout<<cur[i];
        }
        cout<<endl;
        return;
    }
    for(int i =0;i<5;i++){
        if(l%2!=i%2) continue;
        cur[l] = i;
        func(cur, l+1, sz);
    }
}
```

Permutations of “ABC”

ABC

ACB

BAC

BCA

CBA

CAB