

Q1 : Andrew and Rotation

Solution:

```
#include<bits/stdc++.h>
```

```
using namespace std;
```

```
typedef pair<int,int>      ii;
```

```
typedef vector<int>        vi;
```

```
typedef vector<bool>       vb;
```

```
typedef vector<vi>         vvi;
```

```
typedef vector<ii>         vp;
```

```
typedef unordered_map<int,int>    umap_ii;
```

```
typedef unordered_map<char,int>   umap_ci;
```

```
typedef unordered_map<string,int> umap_si;
```

```
typedef unsigned long long int    ull;
```

```
typedef pair<int,int>      ii;
```

```
#define int      long long
```

```
#define fi      first
```

```
#define se      second
```

```
#define INF      0x3f3f3f3f
```

```
#define PI      3.1415926535897932384626
```

```
#define MOD      1000000007
```

```
#define pb      push_back
```

```
#define uset      unordered_set
```

```
#define pq_max      priority_queue<int>
```

```
#define pq_min      priority_queue<int,vector<int>,greater<int>>>
```

```
#define mp      make_pair //Better use {}
```

```
#define size5      100010
```

```
#define fast_io      ios_base::sync_with_stdio(false);cin.tie(NULL);
```

```

#define sublimeProblem      freopen("input.txt", "r", stdin); freopen("output.txt", "w", stdout);

int32_t main()
{
    fast_io;
    // IO Problem;

    int n;
    cin>>n;

    vi arr;

    int mn=INT_MAX;
    int mx = INT_MIN;
    for (int i = 0; i < n; ++i) {
        int x; cin>>x;
        arr.pb(x);
        mn = min(mn, x);
        mx = max(mx, x);
    }

    // cout<<mn<<" "<<mx<<endl;

    int diff =mx - mn;
    diff %= n;

    for( int x : arr){
        if( x == mn){
            rotate(arr.begin(), arr.begin()+arr.size()-diff, arr.end());
            break;
        }
        else if( x == mx){
            rotate(arr.begin(), arr.begin()+diff, arr.end());

```

```
        break;
    }
}

for( int x: arr){
    cout<<x<<" ";
}

return 0;
}
```

Q2: Limak and Tests

Solution:

```
/*  
*  
* Author : Ajay Panchal  
* B.TECH CSE STUDENT  
* LOVELY PROFESSIONAL UNIVERSITY  
* BATCH : 2018-2022  
* GITHUB LINK : https://github.com/ajay-panchal-099  
* PROBLEM STATEMENT :  
*/
```

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
signed main() {
```

```
    int q;
```

```
    cin >> q;
```

```
    deque<int> st;
```

```
    int pos = 1;
```

```
    for (int i = 0; i < q; ++i) {
```

```
        int type;
```

```
        cin >> type;
```

```
        switch (type) {
```

```
            case 1:
```

```
                int ele;
```

```
                cin >> ele;
```

```
                if (pos == 1)st.push_back(ele);
```

```
                else st.push_front(ele);
```

```
                break;
```

```

case 2:
    if(st.empty())break;
    if (pos == 1)st.pop_back();
    else st.pop_front();
    break;
case 3:
    if(st.empty())break;
    if (pos == 1)st[st.size() - 1] += 5;
    else st[0] += 5;
    break;
case 4:
    if(st.empty())break;
    if (pos == 1)st[st.size() - 1] -= 5;
    else st[0] -= 5;
    break;
case 5:
    pos = 1 - pos;
    break;
}
}
int ans = 0;
for(auto x : st)ans += x;
cout << ans << endl;
return 0;
}

```