#include <cstdio>

#include <cmath>

#include <algorithm>

using namespace std;

int pos[10010];

int deg[10010];

int s[10010], t[10010];

int main()

{

freopen("slides.in", "r", stdin);

freopen("slides.out", "w", stdout);

long long ans = 0;

int n, m, p, q, i;

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

for (i = 0; i < n; i++)

scanf("%d", pos+i);

for (i = 0; i < m; i++)

{

scanf("%d%d", &p, &q);

deg[p-1]++;

deg[q-1]--;

}

p = q = 0;

for (i = 0; i < n; i++)

{

while (deg[i] < 0)

{

s[p++] = pos[i];

deg[i]++;

}

while (deg[i] > 0)

{

t[q++] = pos[i];

deg[i]--;

}

}

sort(s, s+p);

sort(t, t+q);

for (i = 0; i < p; i++)

ans += abs(s[i]-t[i]);

printf("%lld\n", ans);

return 0;

}