#include <stdio.h>

#define Min(a, b) ((a)<(b)?(a):(b))

int d[100010][2];

int a[100010][2];

int main()

{

int n, i, j;

scanf("%d", &n);

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

scanf("%d%d", a[i], a[i]+1);

d[0][0] = 0;

d[0][1] = 1;

for (i = 1; i < n; i++)

for (j = 0; j < 2; j++)

{

d[i][j] = n+1;

if (a[i][j] < a[i-1][j] && a[i][j^1] < a[i-1][j^1])

d[i][j] = d[i-1][j]+j;

if (a[i][j] < a[i-1][j^1] && a[i][j^1] < a[i-1][j])

d[i][j] = Min(d[i][j], d[i-1][j^1]+j);

}

if (Min(d[n-1][0], d[n-1][1]) >= n+1)

printf("-1\n");

else

printf("%d\n", Min(d[n-1][0], d[n-1][1]));

return 0;

}