

```
input
Point 1 belongs to cluster A.
Point 2 belongs to cluster B.
Point 3 belongs to cluster B.
Point 4 belongs to cluster B.
Point 5 belongs to cluster B.
Point 6 belongs to cluster B.
Point 7 belongs to cluster B.
Point 8 belongs to cluster A.
Point 9 belongs to cluster B.
Point 10 belongs to cluster A.
Point 11 belongs to cluster A.
Point 12 belongs to cluster B.
Point 13 belongs to cluster B.
Point 14 belongs to cluster B.
Point 15 belongs to cluster B.
Point 16 belongs to cluster A.
Point 17 belongs to cluster A.
Point 18 belongs to cluster A.
Point 19 belongs to cluster A.
Point 20 belongs to cluster A.
```