

Carl, Caroline, Helen, and Han are four friends sharing a one-room workspace. The workspace has a single thermostat which they can set to any integer temperature between **35** degrees to **95** degrees Fahrenheit, inclusive.

The four friends can't agree on the room's temperature! Carl and Caroline don't want it to be too cold, while Helen and Han don't want it to be too hot. Specifically:

- Carl wants it to be *at least*  $c_1$  degrees Fahrenheit.
- Caroline wants it to be *at least*  $c_2$  degrees Fahrenheit.
- Helen wants it to be *at most*  $h_1$  degrees Fahrenheit.
- Han wants it to be *at most*  $h_2$  degrees Fahrenheit.

Given  $c_1$ ,  $c_2$ ,  $h_1$ , and  $h_2$ , is there a satisfactory temperature that all four friends will be happy with? If it's possible, print **YES** ; otherwise, print **NO** .

### Input Format

Four space-separated integers describing the respective values of  $c_1$ ,  $c_2$ ,  $h_1$ , and  $h_2$ .

### Constraints

- $35 \leq c_1, c_2, h_1, h_2 \leq 95$

### Output Format

Print **YES** if it's possible to satisfy all four friends' conditions; otherwise, print **NO** instead.

### Sample Input 0

```
50 40 70 60
```

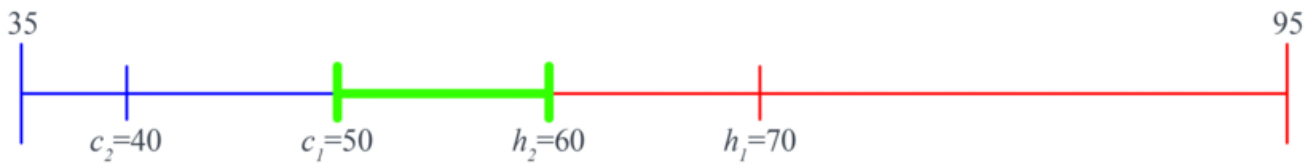
### Sample Output 0

```
YES
```

### Explanation 0

The four friends have the following temperature preferences:

- Carl wants it to be *at least*  $c_1 = 50$  degrees.
- Caroline wants it to be *at least*  $c_2 = 40$  degrees.
- Helen wants it to be *at most*  $h_1 = 70$  degrees.
- Han wants it to be *at most*  $h_2 = 60$  degrees.



Any temperature between **50** and **60** degrees will satisfy all four friends, so we print **YES**.

**Sample Input 1**

```
55 66 66 77
```

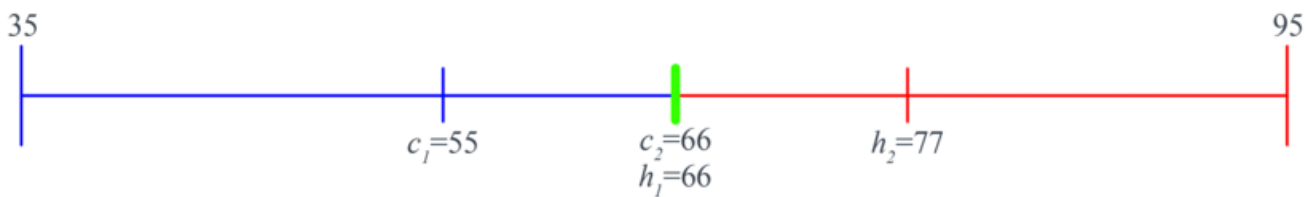
**Sample Output 1**

```
YES
```

**Explanation 1**

The four friends have the following temperature preferences:

- Carl wants it to be *at least*  $c_1 = 55$  degrees.
- Caroline wants it to be *at least*  $c_2 = 66$  degrees.
- Helen wants it to be *at most*  $h_1 = 66$  degrees.
- Han wants it to be *at most*  $h_2 = 77$  degrees.



A temperature of exactly **66** degrees will satisfy all four friends, so we print **YES**.

**Sample Input 2**

```
80 80 40 40
```

**Sample Output 2**

```
NO
```

**Explanation 2**

In this test case, Carl wants the temperature to be at least  $c_1 = 80$  and Helen wants it to be at most  $h_1 = 40$ . There is no temperature that is both  $\geq 80$  and  $\leq 40$ , so we print **NO** because no satisfactory temperature exists.

