Assess your performance by solving these problems on your own!

Chef and Chefina are residing in a hotel.
There are 10 floors in the hotel and each floor consists of 10 rooms.

- Floor 1 consists of room numbers 1 to 10.
- Floor 2 consists of room numbers 11 to 20.

  ...
- Floor i consists of room numbers $10 \cdot (i-1) + 1$ to $10 \cdot i$.

You know that Chef's room number is X while Chefina's Room number is Y ($X \neq Y$).
If Chef starts from his room, find the number of floors he needs to travel to reach Chefina's room.

Input Format

- First line will contain T, number of test cases. Then the test cases follow.
- Each test case contains of a single line of input, two integers X, Y, the room numbers of Chef and Chefina respectively.

Output Format

For each test case, output the number of floors Chef needs to travel to reach Chefina's room.

Sample 1:

Input	Output
4 1 100 42 50 53 30 81 80	9 0 3 1

```python
# Update the code below to solve this problem

t = int(input())

for i in range(t):
    x, y = map(int, input().split())
    xf = (x-1)//10 + 1  # floor number of Chef's room
    yf = (y-1)//10 + 1  # floor number of Chefina's room


    if xf <= yf:
        print(yf - xf)
    else:
        print(xf - yf)


    # 10 * (i-1) + z   i (floor)  / z (room num)
    # to find i: (diff - z) / 10 + 1
```

Test against Custom Input

```
42 50
53 30
81 80
```

Problem

Chef and Chefina are residing in a hotel.

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- Floor 1 consists of room numbers 1 to 10.
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You know that Chef's room number is X while Chefina's Room number is Y.
If Chef starts from his room, find the number of floors he needs to travel to reach Chefina's room.

Input Format

- First line will contain T, number of test cases. Then the test cases follow.
- Each test case contains of a single line of input, two integers X, Y, the room numbers of Chef and Chefina respectively.

Output Format

For each test case, output the number of floors Chef needs to travel to reach Chefina's room.

Constraints

- $1 \leq T \leq 1000$
- $1 \leq X, Y \leq 100$
- $X \neq Y$

Sample 1:

Input	Output
4	9

```python
T = int(input())

for i in range(T):
    x, y = map(int, input().split())
    xf = (x-1)//10 + 1  # floor number of Chef's room
    yf = (y-1)//10 + 1  # floor number of Chefina's room

    if xf <= yf:
        print(yf - xf)
    else:
        print(xf - yf)
```

10:22

Test against Custom Input

```
4
1 100
42 50
53 30
```

Upload code as file

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Sample 1:

Input	Output
4 1 100 42 50 53 30 81 80	9 0 3 1

Explanation:

Test Case 1: Since Room 1 is on 1^{st} floor and Room 100 is on 10^{th} floor, Chef needs to climb 9 floors to reach Chefina's Room.

Test Case 2: Since Room 42 is on 5^{th} floor and Room 50 is also on 5^{th} floor, Chef does not need to climb any floor.

Test Case 3: Since Room 53 is on 6^{th} floor and Room 30 is on 3^{rd} floor, Chef needs to go down 3 floors to reach Chefina's Room.

Test Case 4: Since Room 81 is on 9^{th} floor and Room 80 is on 8^{th} floor, Chef needs to go down 1 floors to reach Chefina's Room.

Did you like the problem statement?

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