SOLVING THE DIFFERENT TIME ZONE CORNER CASE IN THE TIME SLOT PROBLEM:

- We get the input of the time zone offset of both the persons
  Eg: IST (+5.30),PMT(-7.00)
- We also get the available time slot in hour:minute format.
  Eg: H:M - 5:00
- We convert the given time slot to GMT using the provided offset.
  Eg: 9:30 IST to GMT
  = 4:00 GMT [9:30 - 5:30]
- Now, it reads the input slots and compares between the two person's slots.
- If the slots align according to their availability, then the duration available is stored.
  [It is in GMT format now]
- Now we convert the GMT to their local standard time zone and display the maximum time slot available for each persons' time zone.

EXAMPLE WITH EXPLANATION:

Enter the timezone offset1: +530
Enter no. of slots1: 2
Enter the time slots1: 9:00 10:00 13:00 14:00

[internally the time zone converts, 9:00 - 10:00 in GMT is 3:30 - 4:30 and 13:00 -14:00 in GMT is 7:30 - 8:30]

Enter the timezone offset2: -7:00
Enter no. of slots2: 2
Enter the time slots2: 21:30 23:00 1:00 2:00
Enter the time duration (in mins): 30

[internally, this converts to GMT, Making 21:30 - 23:00 as 4:30 - 6:00 GMT and 1:00 - 2:00 as 8:00-9:00 GMT]
So, we check overlap in the GMT converted.
Person 1 is not available at 4:30 but person 2 is available. 3:30 is not available as person 2 is not available but the person is available at both 8:00 - 8:30 in which the maximum time duration needed is 30 minutes as given. So there is no overlap.
NOTE: we check the overlap in GMT
Now, we convert the GMT to each person's time zones and display the output.

OUTPUT:
Person 1 available time: 13:00 14:00 - this is given in IST
Person 2 available time: 1:00 1:30 - this is given in PMT