

Input Format:

First line of the input is the number of robots n and number of pickups m .
 m, n should be positive integers.

After that first n lines will be the location of robots which will be in the form coordinates or pairs. These should be non-negative integers.

Ex: 2 3

Next m lines will be the location of Source/Pick up points which will be in the form coordinates or pairs. These should be non-negative integers.

Ex: 4 6

Next m lines will be the location of Destination/ Drop points which will be in the form coordinates or pairs. These should be non-negative integers.

Ex: 4 15

After that first n lines will be the location of end points of the robots which will be in the form coordinates or pairs. These should be non-negative integers.

Ex: 5 16

Next line takes the number of Temporary storage points t . t should be a positive integer.

After that first t lines will be the location of Temporary storage points which will be in the form coordinates or pairs. These should be non-negative integers.

Ex: 3 3

Output Format:

At first it shows the points of robot and Pickup. Ex : $r(0,0) \rightarrow p(5,0)$

It shows a statement "The destination cell is found" to verify whether Pickup is available on the grid.

Then it gives the path from $(0,0)$ to $(5,0)$ - The Path is $\rightarrow (0,0) \rightarrow (1,0) \rightarrow (2,0) \rightarrow (3,0) \rightarrow (4,0) \rightarrow (5,0)$

Now, it shows points of current position of robot and the destination point.

Ex: $r(5,0) \rightarrow d(0,10)$.Again the statement, "The destination cell is found".

Next path - The Path is -> (5,0) -> (4,0) -> (3,0) -> (2,0) -> (1,0) -> (0,0) -> (0,1) -> (0,2) -> (0,3) -> (0,4) -> (0,5) -> (0,6) -> (0,7) -> (0,8) -> (0,9) -> (0,10)

It shows the above statements for the number of times the robots travelled from its positions to pickups and to destinations.

Next it shows the points from robots at destination point to end point.

Ex: r[0] (0,10) -> e[0] (0,8) .Again the statement, "The destination cell is found".

Then it shows the path - The Path is -> (0,10) -> (0,9) -> (0,8)

It shows the above statements for the number of robots.

Next it shows the complete path of each robot with the time taken for it to travel the whole path.

Ex: Path of robot 1 -> (0,0) -> (1,0) -> (2,0) -> (3,0) -> (4,0) -> (5,0) -> (4,0) -> (3,0) -> (2,0) -> (1,0) -> (0,0) -> (0,1) -> (0,2) -> (0,3) -> (0,4) -> (0,5) -> (0,6) -> (0,7) -> (0,8) -> (0,9) -> (0,10) -> (0,9) -> (0,8) time - 22

Now it shows the total time for all robots - Ex: Total time: 70

Finally, it shows whether there is a conflict or not in the paths of the robots.

Ex: no conflict found

Ex: r2 r3 (0,8)

r3 r5 (4,15)