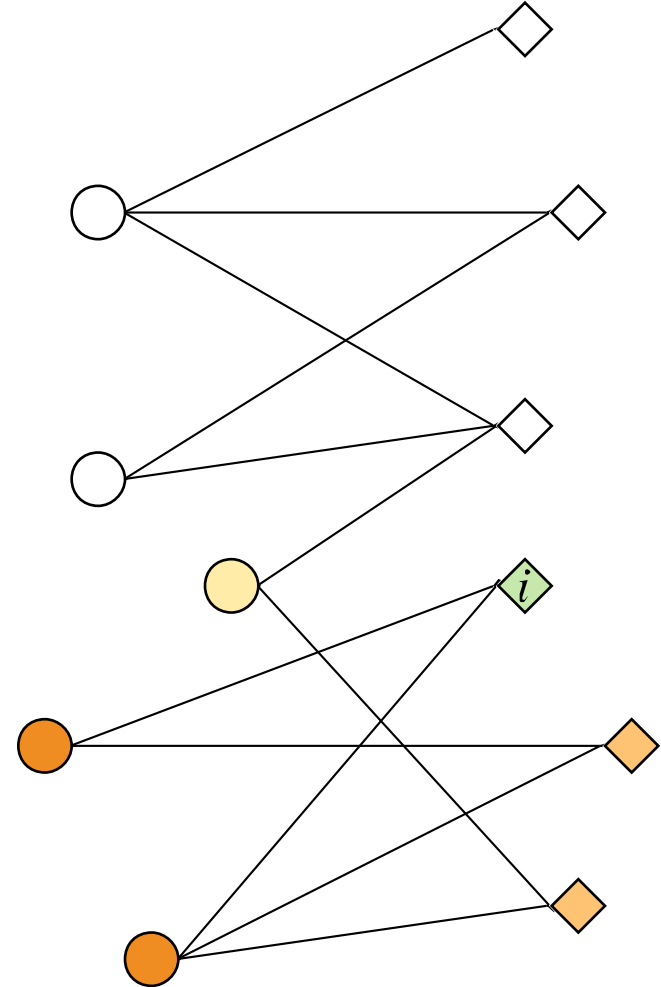target user

target item

user

item

1-hop neighbor

2-hop neighbor

3-hop neighbor

propagate from target user

propagate from target item