1. Embedding layer, which parameterizes each node as a vector by preserving the structure of CKG. Parameterize entities and relations as vector representations.
2. Attentive embedding propagation layers, which recursively propagate embedding’s from a node’s neighbors to update its representation, and employ  
   knowledge-aware attention mechanism to learn the weight of each  
   neighbor during a propagation.

Here we start by a single layer, which consists of three  
components: information propagation, knowledge-aware attention,  
and information aggregation

1. prediction layer----- outputs the predicted matching score. inner product of user and item representations, so as to predict their matching score