How can I get the list of Junction objects in Salesforce using Apex Code?

You can't get the list of junction object directly, but you can use the below code snippet for finding that this object has master-detail relationship or not. Its a trick if you have junction object with two master-detail relationship. As a junction object is a custom object with two master-detail relationships, and is the key to making a many-to-many relationship{as per standard}.

```
Map<String, SObjectField> mapLeadFieldAPIToSchema = Lead.getSObjectType().getDescribe().fields.getMap();
for(String fieldName : mapLeadFieldAPIToSchema.keySet()){
SObjectField field = mapLeadFieldAPIToSchema.get(fieldName);
if(field.getDescribe().getRelationshipOrder() == 0){
//the variable fieldName contains the name of a field which is the parent of a master-detail relationship
system.debug('@@@@'+fieldName);
}
if(field.getDescribe().getRelationshipOrder() == 1){
//the variable fieldName contains the name of a field which is the parent of a master-detail relationship
system.debug('@@@@'+fieldName);
}
}
```

You should use the getRelationshipOrder() method available in the DescribeFieldResult class. This is populated only for Master-Detail relationships and is null for lookup relationships. Also, to get the name of the Master Object, you need to use the getReferenceTo() method.

RelationShipOrder : The type of relationship for a master-detail relationship field. Valid values are:

0 if the field is the primary relationship
1 if the field is the secondary relationship

Notes:

- One Object can have only two Master-Detail relationships .

- If we delete record A (First Master detail relationship is always primary) – then child record c will be deleted.
- If we delete record B then in this case also child record C will be deleted.
- If we delete record C then only C will be deleted , master record will not be deleted.
- If child C has two Master record A and B, Where A is primary relation then Child record C will inherit the look and feel of Parent object A.
- No ownership concerns for the junction object.

- Access to the join object is determined by examining the user's access to both parents—if the user lacks access to one parent, the user will not be able to see the related junction records; additionally if the user has read/write access on one parent and read-only on the other parent, then the user will have the lowest common access which would be read-only for the junction records.

-

A custom object with two master-detail relationships is called Junction Object. Junction objects are used to create many to many relationships between objects. A many-to-many relationship allows each record of one object to be linked to multiple records from another object and vice versa. One Object can have only two Master-Detail relationships.

For example, Let us assume that we have two custom objects – A and B. To provide the many to many relationship between A and B, we will need to create one more object let's say it would be C, it will be called as junction object.

The first master-detail relationship you create on your junction object becomes the primary relationship. This affects the following for the junction object records:
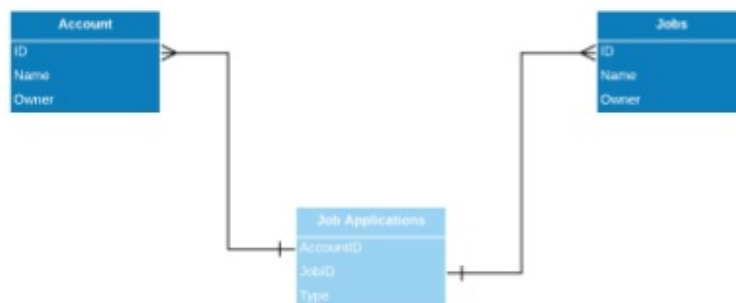
Look and feel: The junction object's detail and edit pages use the color and any associated icon of the primary master object.

Record ownership: The junction object records inherit the value of the Owner field from their associated primary master record. Because objects on the detail side of a relationship do not have a visible Owner field, this is only relevant if you later delete both master-detail relationships on your junction object.

Division: If your organization uses divisions to segment data, the junction object records inherit their division from their associated primary master record. Similar to the record ownership, this is only relevant if you later delete both master-detail relationships.

What is so bad about Junction objects?

- More integration points
  - Master records must exists.
  - Instead of 1 load, there are 3 data load operations.
- Lookup skew
- Ownership skew

What will happen if we undelete the deleted Junction Object?

Master – Detail Relationship data types will be converted to look up relationship data types

Is it possible to delete junction – Object in case of Mater – Detail Relationship?

If the parent objects don't have Roll up Summary fields for the child object then we can delete.

To delete a child object it should not be referred in Apex Classes and Apex Triggers.

Later if we undelete the object, Master detail fields on the junction objects will be converted to look up Fields.

Note:

If we delete only Master – Detail Relationship field from the child object and undelete it from the Recycle Bin then it will be converted to look up relationship.

Parent Object we cannot delete because it will be referred in the child object.

What happens to junction object when associated master record is deleted? A junction object has two master detail relationships.

The record is deleted and placed in the recycle bin.

Junction object records are deleted when either associated master record is deleted and placed in the Recycle Bin. If both associated master records are deleted, the junction object record is deleted permanently, and cant be restored.

Is it possible to achieve Many to Many relationship by using look up relationships?

   Junction Object : This is a custom object with 2 Master - Detail relationships & is the key to making Many to Many relationship.

   To answer the question ,Yes it is possible.

   The downside is ,Junction object will not be automatically deleted when one or both of the objects it is relating are deleted.