```
graph

    directed

- nodes

    edges

- nodes count
- edges count

    hidden nodes

- hidden edges
- hidden nodes count

    hidden edges count

- free node ids
free_edge_ids
free_node_ids_count
- free edge ids count
+ graph()
+ graph()
+ graph()
+ graph()
+ ~graph()
+ make directed()
+ make undirected()
+ is directed()
+ is_undirected()
+ is bidirected()
and 64 more...
- new_node_id()
- new edge_id()

    copy()

del_list()
del list()
            +owner
      edge data
      + id
      + nodes
      + adj pos
      + pos
      + hidden
```