1:构造数列

**INPUT:** array size ;Lower limit of value ;Lower limit of value ;whether the values is ;

**OUTPUT:**array

**if** is **then**

**if** **then**

**for** to **do**

**while** exits in **do**

**end while**

append Integer to

**end for**

**else**

**for** to **do**

append to

**end for**

**end if**

**else**

**for** to **do**

**while** exits in **do**

**end while**

append Integer to

**end for**4

**end if**

**return**

2 构造树

**INPUT:** Number of nodes of the tree ;

**OUTPUT:**Pairs Arrays

**for** to **do**

append

**end for**

**return**

3:构造有向无环图

**INPUT:** Number of nodes of the graph ;Number of edge of the graph ;

**OUTPUT:**Pairs Arrays

**for** to **do**

append

**end for**

**if** **then**

for to **do**

**while** exits **do**

**if** **do**

**end do**

**end while**

append

**end for**

**else**

**while** **do**

append where and not exits in

**end while**

**end if**

**return**

4:构造有向带环图

**INPUT:** Number of nodes of the graph ;Number of edge of the graph ;

**OUTPUT:**Pairs Arrays

**for** to **do**

append

**end for**

**if** **then**

for to **do**

**while** exits do

**if** and **do**

**end if**

**end while**

append

**end for**

**else**

append where and not exits in

**while** **do**

append where not exits in

**end while**

**end if**

**return**

5:检查是否存在负环

**INPUT:** Number of nodes of the graph ;Number of edge of the graph ;struct Arrays ;

**OUTPUT**: or

empty Two-dimensional arrays

**for** in **do**

**end for**

empty

push where

**while** **do**

the top of

pop the top of

**for** to **do**

**if** no null and **do**

**if** **do**

**return**

**end if**

**if** **do**

push into

**end if**

**end if**

**end for**

**end while**

**return**

6: 二分图

**INPUT:** Number of nodes of the graph ;Number of edge of the graph ;

**OUTPUT**:Pairs Arrays

empty array

**for** to **do**

append

**end for**

empty array

**function**

append to

**for** to **do**

**if** and do

**call**

**end if**

**end for**

**end funtion**

**call**

**for** to **do**

while and no exits in **do**

**end while**

append to

**end for**

**return**

7:仙人掌

**INPUT:** Number of nodes of the graph ;

**OUTPUT**:Pairs Arrays

**for** to **do**

append

**end for**

**function**

where is any one of

**call**

**for** to **do**

**if** and **do**

**call**

**end if**

**end for**

**end function**

**cal**l

**for** to **do**

**if** and and **do**

append to

**end if**

**end for**

**return edge**