**Cycle Detections**

**Runners Technique**

/\*

Detect a cycle in a linked list. Note that the head pointer may be 'null' if the list is empty.

A Node is defined as:

class Node {

int data;

Node next;

}

\*/

boolean hasCycle**(**Node head**)** **{**

**if(**head **==** **null)** **return** **false;**

Node fast **=** head**.**next**;**

Node slow **=** head**;**

**while(** fast **!=** **null** **&&** fast**.**next **!=** **null){**

**if(**fast **==** slow**)return** **true;**

fast**=** fast**.**next**.**next**;**

slow**=**slow**.**next**;**

**}**

**return** **false;**

**}**