DANH SACH CAC HAM TRONG Graph:

- 1- jrb_traverse(node,tree) : Duyet tat ca cac node trong cay tree
- 2- int getAdjacentVertices (Graph graph, int v, int* output): Duyet cac dinh ke cua v,luu vao output, return so dinh lien ke
- 3- int adjacent(Graph graph, int v1, int v2) : Kiem tra xem v1 va v2 co phai le 2 dinh lien ke ko return 0 neu ko,1 neu co
- 4- void dropGraph(Graph graph): Xoa do thi
- 5- void BFS(Graph graph, int start, int stop, void (*func)(int): Duyet do thi theo chieu rong ,func la ham in dinh ra mac dinh la :void printVertex(int v)
- 6- void DFS(Graph graph, int start, int stop, void (*func)(int)): Duyet do thi theo chieu sau
- 7- int indegree (Graph graph, int v, int* output): Duyet cac dinh u sao cho u->v co lien ket ,luu vao output va tra ve so dinh u thoa man
- 8- int DAG(Graph graph): Ham kiem tra xem do thi co vong khong, co thi tra ve 0, khong thi tra ve 1
- 9- int connected(Graph graph, int start, int stop): Kiem tra xem 2 dinh start va stop co lien thong voi nhau hay khong, co thi return 1,ko thi 0

-HAM TRONG JRB'lib-

```
10-Jval new_jval_i(int): Ham tra ve mot bien moi Jval luu int
11-Jval new_jval_l(long)
12-Jval new_jval_f(float)
13-Jval new_jval_d(double)
14-Jval new_jval_v(/* void */)
15-Jval new_jval_s(char *)
16- int jval_i(Jval); :Cac ham nay tra ve kieu va gia tri tuong ung ma bien Jval luu long jval_l(Jval); float jval_f(Jval); double jval_d(Jval); void *jval_v(Jval); char *jval_s(Jval);
```

17-Cac ham nay dung de insert 1 bien Jval kieu JRB jrb_insert_str(JRB tree, char *key, Jval val); JRB jrb_insert_int(JRB tree, int ikey, Jval val); JRB jrb_insert_dbl(JRB tree, double dkey, Jval val); JRB jrb_insert_gen(JRB tree, Jval key, Jval val, int

```
(*func)(Jval,Jval)); /*Ham func la ham compare cua kieu Jval can luu*/

18-Cac ham tim kiem bien Jval trong cay JRB JRB jrb_find_str(JRB root, char *key); JRB jrb_find_int(JRB root, int ikey); JRB jrb_find_dbl(JRB root, double dkey); JRB jrb_find_gen(JRB root, Jval, int (*func)(Jval, Jval)); 19-Cac ham xoa trong JRB void jrb_delete_node(JRB node); void jrb_free_tree(JRB root);
```

-HAM TRONG Dllist'lib-

20-

Dllist new_dllist(); Tao mot dllist free_dllist(Dllist); Xoa Dllist dll_append(Dllist, Jval); Insert vao cuoi dll_prepend(Dllist, Jval); Insert vao dau dll_insert_b(Dllist, Jval); Insert truoc node dll_insert_a(Dllist, Jval); Insert sau node dll_delete_node(Dllist); Xoa node int dll_empty(Dllist); Del Dllist Dllist dll_first(Dllist); Lay node dau Dllist dll_last(Dllist); Lay node cuoi