22-01-24 Owap to implement singly with following operations.

@ weate a linked list linked last @ inswittin of a node at first, at any and at end of list. Display the contents of linked list Up>#include & Stdiony #include & mallochy ftruct mode 1 int data; Struct node \* next; Struct node \* create\_11 ( struct node \* 1 8tart Struct node \* new\_code, \*ptr; int num; printf ("In entury -1 to end"); print ("in Enter the tata:"); scant (" 1.0 ", & num); white (num!=-1) new\_node = ( struct\_node \*) malloc ( size of ( struct note) new\_node -> data = num;

```
of (Start == NULL)
    new-node=7 next= NULL;
      Start = new_node;
    y
    else
      ptr= Stout:
       while (ptr -> next != NULL)
             ptr=ptr->nent.
       Ptr->nent=new_node;
       new-note -> next = MULL
     printf ["tinter the data:");
     Scant (" 1.d", & num);
  return start;
y:
Struct node * insert-beg (struct node *star
 Itruct note & new_node;
   int num;
  printf ("In Enter the data:");
   Scanf ("xd", & num);
  new-node=Estruct node *) malloc (siºze of
                         ( peruct note));
   moul note -> dota - mun
```

```
Start = new-mode;
   return Start:
Struct node * inswit-end (struct node *
 Struct note * new_node, * ptr;
  int num;
  printf ("In Enter the data:");
  Scant (" 1.d", & num);
  new_node = ( struct node *) mallo ( ( size of
                                 (struct node)
    new_note -> tata = num;
     new_note -> next = NULL;
      Ptr= Stort;
     if ( start = = NULL).
        Start = new-node;
      else
        while (ptr->nent!=NULY)
                 Ptr: ptr->nent;
        ptr _xarent= new_nose;
        return start;
```

```
Struct mode * insert before ( struct node
                                * stort)
 1
   Struct mode & new-mode, * ptr;
   int num; val;
   printf("in Entery the data:");
    scant (" 1.d ", & num);
   new-node= C&truct node *) malloc
                    ( fire of ( struct node));
      new-node->data= num;
      new-nude-> next= Null;
       Ptr= Stort;
    et (start == NULL)

Etart = new-node;
    printf (4 Enter the value before
            which tata has to be
              inderte 1:11);
     stant (" v.d", & val);
     while (ptr->data!=val)
      preptr -> next = new_mode;
      new_node -> next= ptr:
      return start;
```

Strict node \* Display l'struct node \* Hoy Struct node \* ptr; Ptr= Start; while ( Ptr != NULL) printf ("It vd", ptr-> data); return start; y; 8 truct node \* Start= NULL: 8truct node \* create\_11 ( struct node \*); note \* insert-beg (struct nodet) 8 truct note \* insert-end (struct node \*); struct Struct node \* insert-before (struct node \*) node \* désplay ( struct node \*); Struct

DWAP to implement singly linked list with @ create & neletion of first. and display the contents. Struct node \* de lete-beg (struct node \*star) Etruct node \* ptr; Ptr = Start; Start = Start -> Next; free (ptv); return start; 4) Struct node & delete-end (struct node Itruct note Aptr, \* preptr; ptr= Start; while (ptr->next!=Mull) preptr= ptr; ptr- " ptr= ptr->ment; preptr -> next = NULL; tree (ptr); teturn start; 45

struct mode " Struct node \* ptr, \* preptr: int val Printf ("Enter the value after which the note has to be deleted;"). Scanf (" Y.d", Eval): ptr = Start; preptr= ptr: while (preptr -> data!= Val) preptr= ptr; Ptr= Ptr->next; preptr -> ment= ptr->ment; free (Ptr); neturn stayt; 4. \* delete - beg (struct node \*) Struck note Struct node \* delete-end (struct node\*) Struct node \* delete\_after C Struct notes \* desplay ( struct node \*) struct note Struct node + display ( struct node \* stoll Estruct node \*ptr; pt= stort

Olp: 1. create 1°st 2. Display. 3. insert-beg 4. Insert\_end 5. intert-random Enter thoice · 1 Enter -1 to end? Enter data: 3 4 5 6 enter choice: 2 3 4 5 6 Enter Choice: 3 enter value: 2. enter choice: 2 23451 Enter choice: 4 Enter value: 7 lenter Choice: 2 234567 enter Choice: 5. Enter value: 9 Enter value before which has to be inserted: 5 Enter value Enter Choice: 2 2345967