

DATE: 23.11.20 1/ Program to implement singly linked list. #include < etdio. h> include Litalib. h> Struct node & uttuct node \* link; typed of uture node \* NODE; NODE igetnode () 2 ? 2 = (NODE) malloc (size of (strut node)); uf (x == NULL) } print ( " Hemory Full ( +n") void freenode (NODE 2) ? NODE insut front (NODE first, int item) ? NODE temp; temp = uget node (); temp -> unjo = item;

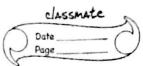
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yetuun NUL;
while ( w -> wink ! = NULL) &
DEN = NULL;
im = hist;
printfl" Item deleted at har end is olod",
ian -> info);
free ( un);
prev -> link = NULL;
justien fiest;
NODE insut-pos(int item, int pos, NODE first)?

NODE temp, sur, pur;

wint usunt:
 int dount;
 temp = getnode();
 temp -> lingo = item;
 temp -> link = NULL;
 4 ( first == NULL && pas == 1) {
 if (first = = NULL) }
 print ( "Invalid position! In");
 temp -> link = first;
 fish = temp;
 utun temp;
Vount = 1;
 prev = NUL;
```

```
we = fill;
while [ wu != NULL && wount != por ) {
  printf ("Invalid position (n");
  NODE delite-pos (intpos, NODE first) &
   int voint , flag = 0;
   printf [ "Invalid position (n");
   When NULL;
     frenode (cus);
         Lucy = NULL) ?
   1 (count == pos) }
```

```
blak;
illount ++;
pred = lus;
Jun = un -> link;
 Henty ("Invalid position In");
 return first;
 frende (cus);
 setur just
 void display (NODE first) ?
 NODE temps
 if first = = NULL) 2
 prints ("dist empty, vannot idisplay items! In").
for (leny) = first; temp! = NULL; temp = temp=0
 puntil " · I. dn", temp -> unfo);
 unt moun () {
 wint item, whoma, key, pos;
 wint wount = 0;
 NODE filst = NULL;
 sport In 4. leletefront Ins. Insut in fo position
 he 6, belete into position In 7. Deeplay in 8. Fruit ( w)
printf ("Enter the renorce;");
```



```
want (" of dy & choice);
witch (unoice) &
want ("! od", & item);

yout = insert - rear (first, item);
want (" of od", & item);
 Vasi 5: printfu Enter item to be insulted at
 iginen position: \u").
 scanf (" · l· d", & item);

printf l'" Extre the projection ("");

uranf [ " · l· d", k pos),

which = insert_pos ( u'tem, pos, piest);
  Mary (" ol-d", 2 pos);
  piret = deleté-pos (pos, piest);
  van 7: display (first);
   break;
   default: init (0);
  buck;
  setur O;
```