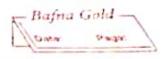


	LAB-4
	Insertion in a Linked List.
_=)	#include <stdio.h></stdio.h>
	+tinclude <stalib.h7< td=""></stalib.h7<>
	void push ();
	void append ();
	void display();
	vaid insert at -pss ();
	struct node
	int data;
	struct node * next;
	);
	struct node * head = NULL;
	void main ()
=	{
	int ch;
	while (ch!=6)
	{ printf(" 1. Insert at begin 2. Insert at end 3. Insert in middle and 4. Exit (""); printf("Enter your choice:");
	scanf ("1.d", 4 stan);
- Sa	
	switch (ch)
_	
	case 1:
- 1/2 -	push ();
- 12	break;
	(age 2:
	append L);
HOLEN AL	break;
The state of the s	

```
insert-at-porl);
           break;
              display ();
   print ! (" Exited"))
void push 1)
   int data;
   Struct node * new node = (struct node *)
      mallor (size of (struct node));
   printf ("Enter data: ");
   scanf (" % d", frew-node -> data);
   new_node -> next = head;
   head = new-node;
void append()
   struct vode * last = head;
   struct node * new nede = (struct node)
      malloc (size of (struct node));
   printf("Enter data: ");
   scanf ("1.d", Incw node -> data);
   new-node -> next = NULL;
```



```
if (head == NULL)
        new_node = head;
        while (last -> next 1= NULL)
          last = last -> next;
         last = new-node;
vsid insert - at - pos ()
   struct nede *temp : head;
   struct node * ptr = (struct node *) malloc
            (size of (struct node));
   printf("Enter data:");
   scant ("1-d", of ptr -> data);
   printf ("Enter the position:");
   scant ("0/0d", & pos);
   if (par = = 1)
       ptr -> next = temp;
        ptr = head;
   else____
      for (int i= 2; i < po1 - 1; i+t)
          temp = temp -> next;
           new pto -> next = temp -> next;
           temp->next = ptr;
```

```
pt => next = NULL;
 void display ()
     struct node * p = head?
      print f (" * List: [n");
      while (p-) next 1: NULL)
          printf(""dl", p-)data);
           p=p->next;
 OUTPUT :
1. Insert from beginning a Insert at end
3. Insert at particular position 4. Display 5. Ext
Enter the data to be inserted: 5
 Enter the data to be inserted: 4
Enter choice: 2
Enter data: 6
Enter thore: 3
Enter data: 7
Enter position: 2
5 -> 7 -> 4 -> 6 -> NULL
Enter choice: 5
Exited
```