Experiment No: 5

Code:

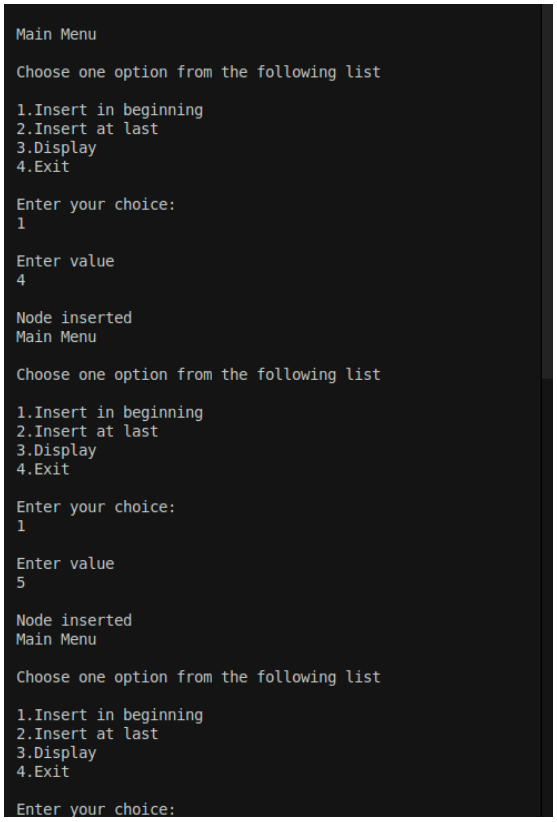
```
#include<stdio.h>
#include<stdlib.h>
struct node
{
   int data;
   struct node *next;
};
struct node *head;
void beginsert ();
void lastinsert ();
void display ();
void main()
{
   int choice = 0;
   while(choice!=9)
   {
       printf("\nMain Menu\n");
       printf("\nChoose one option from the following list\n");
       printf("\n1.Insert in beginning\n2.Insert at last\n3.Display\n4.Exit\n");
       printf("\nEnter your choice:\n");
       scanf("%d",&choice);
       switch (choice)
       {
           case 1:
           beginsert();
           break;
           case 2:
           lastinsert();
```

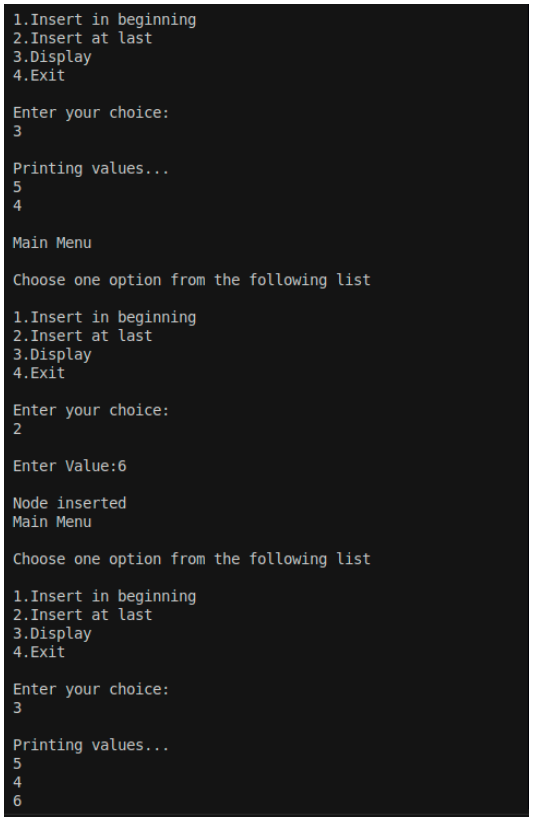
```
            break;
            case 3:
            display();
            break;
            case 4:
            exit(0);
            break;
            default:
            printf("\nPlease enter valid choice");
        }
    }
}
void beginsert()
{
    struct node *ptr;
    int item;
    ptr=(struct node*) malloc(sizeof(struct node*));
    if(ptr==NULL)
    {
        printf("\nOverflow");
    }
    else
    {
        printf("\nEnter value\n");
        scanf("%d",&item);
        ptr->data=item;
        ptr->next=head;
        head=ptr;
        printf("\nNode inserted");
    }
}
```

```
void lastinsert()
{
   struct node*ptr,*temp;
   int item;
   ptr=(struct node*)malloc(sizeof(struct node*));
   if(ptr==NULL)
   {
       printf("\nOVERFLOW");
   }
   else
   {
       printf("\nEnter Value:");
       scanf("%d",&item);
       ptr->data=item;
       if(head==NULL)
       {
           ptr->next=NULL;
           head=ptr;
           printf("\nNode inserted");
       }
       else
       {
           temp=head;
           while(temp-> next!=NULL)
           {
               temp=temp->next;
           }
           temp->next=ptr;
           ptr->next=NULL;
           printf("\nNode inserted");
```

```
        }


    }
}
void display()
{
    struct node*ptr;
    ptr=head;
    if(ptr==NULL)
    {
        printf("Nothing to print");
    }
    else
    {
        printf("\nPrinting values...\n");
        while(ptr!=NULL)
        {
            printf("%d\n",ptr->data);
            ptr=ptr->next;
        }


    }


}
```

Output:





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