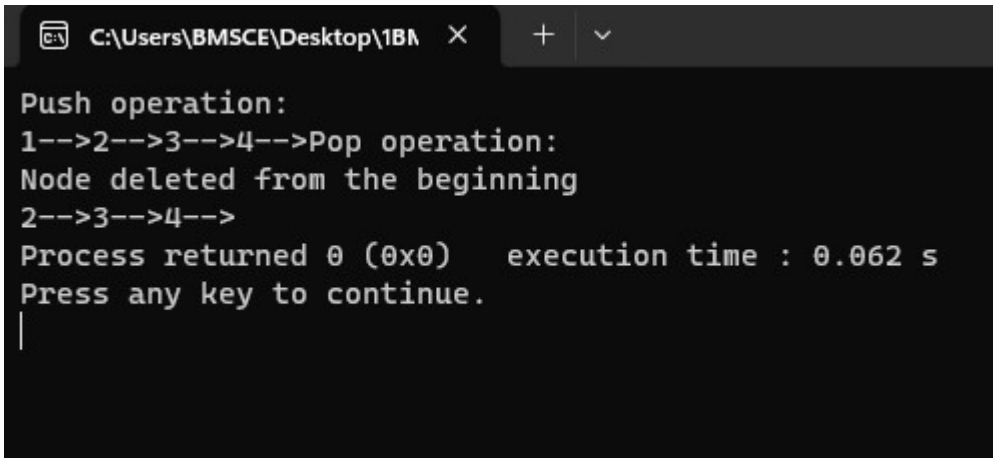
6b) WAP to Implement Single Link List to simulate Stack & Queue Operations.

```
#include <stdio.h>
#include <stdlib.h>
struct node
{
   int data;
   struct node *next;
};
void push(struct node** head,int value)
{
   struct node* new_node=(struct node*)malloc(sizeof(struct node));
   new_node->data=value;
   new_node->next=*head;
   *head=new_node;
}
void pop(struct node** head)
{
   struct node *ptr=*head;
   if(head==NULL)
   {
      printf("List is empty");
      return;
   }
   else
   {
```

```
        *head=ptr->next;
        free(ptr);
        printf("Node deleted from the beginning\n");
    }
}
void display(struct node* node)
{
    struct node *temp=node;
    while(temp!=NULL)
    {
        printf("%d-->",temp->data);
        temp=temp->next;
    }
}
void main()
{
    struct node* head=NULL;
    push(&head,4);
    push(&head,3);
    push(&head,2);
    push(&head,1);
    printf("Push operation:\n");
    display(head);
    printf("Pop operation:\n");
    pop(&head);
    display(head);
```

}

Output:


C:\Users\BMSCE\Desktop\1BM
Push operation:
1-->2-->3-->4-->Pop operation:
Node deleted from the beginning
2-->3-->4-->
Process returned 0 (0x0)   execution time : 0.062 s
Press any key to continue.