***PROGRAM:***

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

struct Node

{

int Data;

struct Node\* next;

}\*rear, \*front;

void delQueue()

{

struct Node \*var=rear;

if(var==rear)

{

rear = rear->next;

free(var);

}

else

printf("\nQueue Empty");

}

void push(int value)

{

struct Node\*temp;

temp=(struct Node\*)malloc(sizeof(struct Node));

temp->Data=value;

if (front == NULL)

{

front=temp;

front->next=NULL;

rear=front;

}

else

{

front->next=temp;

front=temp;

front->next=NULL;

}

}

void display()

{

struct Node \*var=rear;

if(var!=NULL)

{

printf("\nElements are as:\nFRONT->");

while(var!=NULL)

{

printf("\t%d\n",var->Data);

var=var->next;

}

printf("->REAR\n");

}

else

printf("\nQueue is Empty");

}

int main()

{

int i=0;

front=NULL;

while(1)

{

printf(" \nLINKED LIST IMPLEMENTATION OF QUEUE ADT");

printf(" \n1. Enqueue");

printf(" \n2. Dequeue");

printf(" \n3. Display Data of Queue");

printf(" \n4. Exit\n");

printf(" \nChoose Option: ");

printf("\nwrong choice for operation");

int value;

scanf("%d",&i);

switch(i)

{

case 1:

printf("\nEnter a valueber to push into Queue: ");

scanf("%d",&value);

push(value);

display();

break;

case 2:

delQueue();

display();

break;

case 3:

display();

break;

case 4:

exit(0);

default:

printf("\nwrong choice for operation");

}

}

}

***OUTPUT:***

******



